ielab Catalogue

Reference Materials

for laboratories

- Microbiological Reference Materials
- Molecular Diagnostic Kits
- Physical-chemical Reference Materials

Issue: March 2025

Accredited Producer of Reference Material by ENAC according to ISO 17034
Accreditation granted for BACredi line and LD23 Sludge

Index

ielab: experience, commitment and quality

ielab is an international scope company dedicated to the provision of services and products for the application of quality in laboratories

Our commitment to quality and efficiency is demonstrated by our certifications and accreditations:

ISO 9001:2015 Certification of all the activities

Accreditation according to ISO/IEC 17043 Standard as Provider of Proficiency Testing Schemes, according to the scope of accreditation No 2/PPI007

Accreditation according to ISO 17034 Standard as Producer of Reference Materials (BACredi line), according to the scope of accreditation No 1/PMR001

Our services

Proficiency Testing Schemes

Kits for Molecular Diagnostic by qPCR

Microbiological and Physical- chemical Reference Materials

Technological solutions tailored to customer needs

Check and order online all our services:
https://tienda.ielab.es/

How to place orders through ielab's online shop?

1. Access to the ieshop

   https://tienda.ielab.es/

2. Log in or Create a new register

3. Search the desired products

4. Add them to the cart

5. Confirm the items

6. Check the status of your order

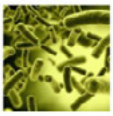
7. Receive the goods

Example of a product search

Microbiological Reference Material

Classic Line

Bacillus subtilis



BACuali *B. subtilis*

Microbiological Reference Materials

Microbiological Reference Materials

ielab presents a range of reference materials especially designed to facilitate all quality control tasks performed in microbiological laboratories.

In all the production ielab follows the requirements established in the ISO 17034 Standard, and certified microbiological reference materials are quantified by certification tests carried out by a laboratory network following UNE-EN ISO/IEC 17025 criteria. Every material is supplied accompanied by a Quick User Guide and the corresponding Analysis Report or Certificate.

ielab has 4 lines of Microbiological Reference Materials:

General Microbiology

- General Microbiology Strains
- Water BAControl Selection
- BACredi Line: Accredited Reference Material

Pharma Line

- Pharmacopoeia Strains
- Double Quantification Strains
- Strains for Hydration in 10 mL
- Pharma BAControl Selection (Challenge Test and Growth Promotion)

Environmental and In-house Isolates

Helminths

Complementary Material and Services

Why choosing ielab Microbiological Reference Materials?

Simple
Devices easy to handle

Fast
Bacterial suspension ready in only 3 steps and 10 minutes

Easy to store
In a conventional freezer (-20 ±5 ºC)

Secure
Minimum manipulations and no risk of contamination

Traceable
Strains traceable to the CECT® (Spanish Type Culture Collection)

Pure
A single passage from the reference stock strain (reserve strain)

Quality
Manufactured according to ISO 17034 Standard

With known concentration
Indicated in the Analysis Report or Certificate

Customizable
Possibility of preparing custom Microbiological Reference Material

Flexible
Available in different formats and ranges of concentration

Stable
Shelf life up to 1 year and stable for 8h refrigerated after reconstitution

Economic
Good value for money

Profitable
Up to 200 tests per tablet (cfu/0.1 mL)

ielab has signed a collaboration agreement for the supply by the CECT® of microbiological reference strains for the processing and manufacturing by ielab of reference material of strains traceable to CECT® and its subsequent sale to third-party clients.

CECT
VNIVERSITAT DE VALÈNCIA
Derived from CECT® strains

Products

Material	BACuali	BAControl	BACuanti
Description	Qualitative microbiological reference material for which the identity of the microorganism supplied is guaranteed	Quantitative microbiological reference material for which each tablet contains a specific number of viable and culturable cells, obtained by the manufacturer under the test conditions specified in the Analysis Report	Certified quantitative microbiological reference material for which each tablet contains a specific number of viable and culturable cells, obtained from a certification study involving a network of accredited laboratories according to UNE-EN ISO/IEC 17025 Standard
Intended use	Preparation of work samples for their use in internal quality controls in terms of precision	Internal quality controls in terms of precision (control of process, control charts and culture media quality controls)	Validation (bias, accuracy and precision) of microbiological methods. Preparation of work samples for their use in internal quality controls
Shelf life	6- 12 months	6- 12 months	3-6 months
Format	· 5-tablets device · 5-swabs envelope (BACswab)	· 5-tablets device (BAControl -5) · 10-vials box (BAControl -10)	· 5-tablets device (BACuanti)
Photo			

ANALYSIS REPORT

BACuali

(reference material, RM)

CECT
Universitat de València
Derived from CECT* strains

Producer

ielab Calidad, S.L.
C/ Dracma, 7
Pol. Ind. Las Atalayas
03114 Alicante (España)
Tlf: +34 966 10 55 01

Description

Part No.: 990067
Microorganism: *Citrobacter freundii* V318 traceable to CECT 4626 (corresponds to NCTC 6272; WDCM 00077), with one passage from de Culture Collection reference stock strain

Batch No.: PCF40120
Manufacturing date: 05-Mar-2024
Expiry date 12-Apr-2025
Format: Freeze-dried tablet

Authenticity proof of the used Culture Collection strain

Biochemical identification test

Safety information

Risk group 2

Storage conditions

Keep at -20±5ºC

Intended use

Preparation of work samples for internal quality controls in terms of precision.

Reconstitution conditions

(indicated in the User Guide)
Solvent: Sterile distilled water
Volume: 20 mL
Reconstitution time: 10 minutes

Producer analysis conditions

Laboratory: one laboratory following ISO 17025 requirements
Dilutions: Up to 10^2
Analyzed volume: 1 mL
Technique: Filtration
Incubation temperature: 36 ± 2º C
Incubation period: 21 ± 3h
Culture medium: Agar CCA (coliforms chromogenic agar)
Filtration membranes: Mixed cellulose esters (0.45 µm)

Quality controls in the described analysis conditions

Contamination: Not detected
Homogeneity: Homogeneous(u_H=0.019 log)
Stability: Stable(u_E=0.030 log)
Percentage of analyzed batch: 15%

Alicante, 12th of April 2024

Raquel Múrtula Corbí
Technical manager of microbiology

Manufactured according to ISO 17034 requirements

ANALYSIS REPORT

BAControl-5

(reference material, RM)

CECT
VNIVERSITAT DE VALÈNCIA
Derived from CECT® strains

Producer

ielab Calidad, S.L.
C/ Dracma, 7
Pol. Ind. Las Atalayas
03114 Alicante (España)
Tlf: +34 966 10 55 01

Description

Part No.: 990230
Microorganism: *Salmonella enterica subsp. enterica serovar Abony* S555 traceable to CECT 545 (corresponds to NCTC 6017; WDCM 00029), with one passage from de Culture Collection reference stock strain
Batch No.: PSS40022
Manufacturing date: 19-Mar-2023
Expiry date 26-Apr-2024
Format: Freeze-dried tablet

Authenticity proof of the used Culture Collection strain

Biochemical identification test

Safety information

Risk group 2

Storage conditions

Keep at -20±5ºC

Intended use

Internal quality controls in terms of precision (control of process, control charts and culture media quality controls)

Reconstitution conditions

(indicated in the User Guide)
Solvent: Sterile distilled water
Volume: 20 mL
Reconstitution time: 10 minutes

Producer analysis conditions

Laboratory: one laboratory following ISO 17025 requirements
Dilutions: Does not apply
Analyzed volume: 0.1 mL
Technique: Spread plate
Incubation temperature: 32 ± 2º C
Incubation period: 21 ± 3h
Culture medium: TSA (Tryptone soya agar)
Filtration membranes: Does not apply

Quality controls in the described analysis conditions

Contamination: Not detected
Homogeneity: Homogeneous(u_H=0.018 log)
Stability: Stable(u_E=0.018 log)

Results obtained in the reconstitution volume

Percentage of analyzed batch: 15%
Number of test: 56
Obtained value: $3.55x10^1$ cfu/0.1 ml
95% Confidence interval:
$1.86x10^1$ - $6.76x10^1$ cfu

Alicante, 26th of April 2023

Raquel Múrtula Corbí
Technical manager of microbiology

Manufactured according to ISO 17034 requirements

comercial@ielab.es
www.ielab.es

CERTIFICATE OF ANALYSIS

BACuanti

(certified reference material, CRM)

Certified by

ielab Calidad, S.L.
C/ Dracma, 7
Pol. Ind. Las Atalayas
03114 Alicante (España)
Tlf: +34 966 10 55 01

Description

Part No.: 990536
Microorganism: *Legionella anisa* L6839 traceable to CECT 8177 (corresponds to ATCC 35292; WDCM 00106), with one passage from de Culture Collection reference stock strain

Batch No.: PLA40082
Manufacturing date: 09-Mar-2024
Expiry date 16-Oct-2024
Format: Freeze-dried tablet

Authenticity proof of the used Culture Collection strain

Molecular methods

Safety information

Risk group 2

Intended use

Validation (bias, accuracy and precision) of microbiological methods. Preparation of work reference samples for internal laboratory analyses. Material specially designed for assays with polycarbonate membrane filters (former ISO 11731-1).

Reconstitution conditions

(indicated in the User Guide)
Solvent: Sterile distilled water
Volume: 20 mL
Reconstitution time: 10 minutes

Storage conditions

Keep at -20±5ºC

Certification study

(Analysis conditions)
Laboratory: 5 laboratories following ISO 17025 requirements

Dilutions: Up to 10^2
Analyzed volume: 1 mL
Technique: Filtration
Incubation temperature: 36 ± 2º C
Incubation period: 96 ± 4h
Culture medium: GVPC Agar
Filtration membranes: Mixed cellulose esters (0.45 µm)

Quality controls in the described analysis conditions

Contamination: Not detected
Homogeneity: Homogeneous(u_H=0.031 log)
Stability: Stable(u_E=0.037 log)

Results obtained in the reconstitution volume

Percentage of analyzed batch: 15%
Number of test: 56
Certified value: 5.18×10^4 cfu/tablet
Standard Uncertainty *(k = 1)*: ±5.8%
95% Confidence interval:
1.48×10^4 - 1.81×10^5 cfu

Alicante, 16th of April 2024

Raquel Múrtula Corbí
Technical manager of microbiology

Manufactured according to ISO 17034 requirements

General Microbiology

Intended use:

- Method validation
- Research projects
- Internal quality control
- Equipment calibration
- Culture media quality control
- Microbial detection and enumeration

General Microbiology Strains

ielab offers a wide range of Microbiological Reference Materials for the microbiological strains commonly used in the quality controls performed in the laboratories.

These materials are available in qualitative and quantitative formats, and in different concentration ranges. The expressed concentration is calculated by dissolving a tablet in 20 mL of sterile water, as indicated in the User Guide that accompanies the product.

			Concentration (cfu/tablet)		
Strain (traceability)	Other collections	Format	Low (<100)	Intermediate (100-1000)	High (>1000)
Achromobacter denitrificans (CECT 449)	ATCC 15173; NCTC 8582; CCM 3427; CCRC 12838; CCRC 14342; CCUG 407; CIP 77.15; DSM 4612; DSM 30026; Fredrich 55B; IFO (now NBRC) 15125; JCM 5490; Kosako 85022; LMG 1231; LMG 3510; NCIMB 11961; RH 12; RIMD 0114003; USCC 1474; USCC 2521	BACuali	992727		
Acinetobacter sp (CECT 4632)	CCUG 31979; NCIMB 9871; strain CHol	BACuali	992729		
Aerococcus viridans[1] (CECT 978)	ATCC 11563; CCM 1914; DSM 20340; IFO 12219; NCTC 8251; NCDO 1225; R.E.O. Williiams M1; WDCM 00061	BAControl-5	-	-	993010
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali	992730		
Aeromonas hydrophila (CECT 839)	ATCC 7966; CCRC 11032; CCRC 13018; CCUG 14551; CDC 359-60; CDC 9079-79; CIP 76.14; CN 6665; IAM 12460; JCM 1027; Kosako 68; LMG 2844; NCIMB 9240; NCTC 8049; Popoff 543; RH 35; Sakazaki 68; NRS 86; strain BPE 143; WDCM 00063	BAControl-5	992800	-	-
		BAControl-10	-	-	-
		BACuanti	992794	-	-
		BACuali	-		
Aspergillus brasiliensis[2] ***(niger)*** (CECT 2574)	WDCM 00053; ATCC 16404; B 39906; B 42936; CABIM 149007; CBS 733.88; CCTM La 2212; DSMZ 1387; DSMZ 1988; FRR 6034; IFO 9455; IHEM 2311; IHEM 3766; IHEM 3794; IMI 149007; MUCL 29039; NCPF 2275; Ringel WLRI 034(120); UMIP 1431.8	BAControl-5	990160	990386	990161
		BAControl-10	990164	990387	990165
		BACuanti	990189	990388	990190
		BACuali	990167		
		BACswab	992818		

[1] The use of this strain is recommended in the set of ISO 11133 Standards

[2] This strain is also available for use in the pharmaceutical industry according to the European Pharmacopoeia. Check references in ielab's Pharma section.

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet)		
			Low (<100)	Intermediate (100-1000)	High (>1000)
Aspergillus caessiellus (CECT 20807)	WDCM 00183; ATCC 42693; FRR 2176; IAM 13845; JCM 12743	BACuali		992508	
Aspergillus niger (CECT 2807)	ATCC 6275; CBS 131.52; CBS 113.50; CBS 769.97; CCTM La 2216; DSM 1957; Friedrich A98; IFO 6341; IMI 045551; KCC F-0086; MUCL 19002; NRRL 334; QM 324; QM 458; strain AM 324; strain LA 2216; Thom 4247; USDA TC 215-4247; VTT D-81078; WB 334; WDCM 00144	BAControl-5	992643	992644	-
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali		992642	
Bacillus cereus (CECT 193)	WDCM 00001; ATCC 9634; ATCC 11778; BTCC 924; BUCSAV 424; CCM 869; CCRC 10446; CCTM La 1138; CCUG 7415; CCUG 10781; CFBP 488; CFBP 1964; CIP 64.52; CNCTC Bc 7/69; DSMZ 345; DSMZ 4490; FDA PCI 213; HNCMB 100003; IFO 3836; IL 1; IMET 10884; LMD 61.21; LMG 8221; NCFB 720; NCIMB 8012; NCIMB 9231; NCTC 10320; PCI 213; PCM 1948; PCM 2019; Prunier 104-4; Waksman strain O	BAControl-5	990316	990389	990321
		BAControl-10	990317	990390	990322
		BACuanti	990323	990391	990326
		BACuali		990315	
		BACswab		992820	
Bacillus cereus (CECT 131)	ATCC 10876; CCRC 11267; FIRDI BA14; Hankey B43; IAM 1656; IAW 2; LMD 65.1; NCFB 721; NCIMB 8579; NCTC 7464; NRRL B-569; NRS 1256; PCM 2003	BAControl-5	992582	992583	992584
		BAControl-10	992585	992586	992587
		BACuanti	992588	992589	992590
		BACuali		992591	
Bacillus cereus k250 (CECT 4094)	CCTM La 2868; CIP 69.12; Chabbert K250 TR; NCTC 10989	BACuali		992695	
Bacillus cereus (CECT 148)	ATCC 14579; NCTC 2599; CCEB 625; CCM 2010; CCRC 10603; CCRC 11026; CCTM La 3674; CCUG 7414; CIP 66.24; DSM 31; FIRDI 603; Ford 13; Gibson 971; IAM 12605; JCM 2152; LMD 75.8; LMG 6923; NCFB 1771; NCIMB 9373; OUT 8406; VTT E-93143	BAControl-5	-	-	992798
		BAControl-10	-	-	992799
		BACuanti	-	-	-
		BACuali		992641	
Bacillus subtilis[1, 2] (CECT 356)	WDCM 00003; ATCC 6633; BTCC 7241; BUCSAV 425; CCM 1999; CCRC 10447; CCTM La 2114; CCUG 10779; CFBP 1963; CIP 52.62; CNCTC Bs 8/58; DSMZ 347; GISK 010011; Hankey B14; HMGB B100; HNCMB 100007; IAM 1069; IAW 15; IFO 3134; IFO 13720; IL 13; IMET 10880; JCM 2499; LMD 89.157; LMD 47.15; LMG 8197; NCAIM B.01268; NCFB 1733; NCIMB 8566; NCTC 10400; NRRL NRS-231; NRS 231; PCM 219; PCM 1949; PCM 2021; PZH 729; VKM 720; VTT E-85231; WHO 9	BAControl-5	990208	990392	990210
		BAControl-10	990209	990393	990211
		BACuanti	990212	990394	990213
		BACuali		990207	

[1] The use of this strain is recommended in the set of ISO 11133 Standards

[2] This strain is also available for use in the pharmaceutical industry according to the European Pharmacopoeia. Check references in ielab's Pharma section.

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet) Low (<100)	Intermediate (100-1000)	High (>1000)
Bacillus subtilis[1] (CECT 8266)	NCTC 5398; WDCM 00070	BACuali	992789		
Bordetella bronchiseptica (CECT 440)	ATCC 4617; CCM 4416; CCRC 11548; CCTM La 166; CCUG 2514; CIP 53.157; CNCTC Brb 5/63; DSM 10303; GISK 150054; IAW 61; LMG 1808; NCIMB 8935; NCTC 8344; NRRL B-140; PCI 1701; PCM 1943; WHO 11	BACuali	992973		
Campylobacter coli[1] (CECT 7571)	ATCC 43478; CCM 7227; Penner 76-GA2; PC262; WDCM 00004	BACuali	992784		
Campylobacter jejuni[1] (CECT 7572)	ACM 5044; AS-83-79; ATCC 33291; CCUG 33057; CIP 111052; WDCM 00005	BAControl-5	-	-	992622
		BAControl-10	-	-	992768
		BACuanti	-	-	-
		BACuali	992646		
Campylobacter jejuni (CECT 8119)	CCM 7212; ATCC 29428; CIP 103778; WDCM 00156	BAControl-5	-	-	992961
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali	-		
Candida albicans (CECT 1392)	ATCC 2091; B 41838; CBS 2730; CCTM La 3462; Chodat 132; CNCTC 55/79; DSMZ 1665; IFO 1393; IHEM 3740; MUCL 38887; NCPF 3255; NCYC 854; NRRL Y-79; UMIP 1180.79; WDCM 00055	BAControl-5	992693	992694	-
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali	992692		
Candida albicans[2] (CECT 1394)	WDCM 00054; ATCC 10231; B 42904; CBS 6431; CCTM La 2785; CCY 29-3-106; DSMZ 1386; Emmons 3149; HAMBI 484; IFO 1594; IHEM 4263; JCM 2085; MUCL 30114; NCPF 3179; NCYC 1363; NIH 3147; UMIP 48.72; VTT C-85161	BAControl-5	990158	990395	990159
		BAControl-10	990162	990396	990163
		BACuanti	990191	990397	990192
		BACuali	990166		
		BACswab	992817		
Candida dubliniensis (CECT 11455)	CBS 7987; NCPF 3949; NRRL Y-17841; PYCC 8337	BACuali	992731		
		BACswab	992963		

[1] The use of this strain is recommended in the set of ISO 11133 Standards

[2] This strain is also available for use in the pharmaceutical industry according to the European Pharmacopoeia. Check references in ielab's Pharma section.

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet) Low (<100)	Intermediate (100-1000)	High (>1000)
Candida lusitaniae (CECT 12888)	IFI 1362	BACuali	992732		
Citrobacter freundii (CECT 4626)	WDCM 00077; NCTC 6272; NCIMB 8645; strain B	BAControl-5	990100	990398	990101
		BAControl-10	990129	990399	990130
		BACuanti	990068	990400	990082
		BACuali	990067		
Citrobacter freundii[1] (CECT 7464)	WDCM 00006; ATCC 43864; CCUG 53829; CIP 103547; LMG 21265; LRA 117.03.76	BAControl-5	992602	992603	992604
		BAControl-10	992605	992606	992607
		BACuanti	992608	992609	992610
		BACuali	992523		
Clostridium bifermentans[1] (CECT 550)	WDCM 00079; NCTC 506; CIP 110068; CN 4781; NCFB 1711; NCIMB 506; F1	BAControl-5	990516	990519	990522
		BAControl-10	990517	990520	990523
		BACuanti	990518	990521	990524
		BACuali	990525		
Clostridium perfringens[1] (CECT 7468)	ATCC 12916; CCM 7176; NCIMB 13079; NCTC 8238; NRRL B-23850; 281/50; WDCM 00080	BACuali	992652		
Clostridium perfringens[1] (CECT 376 T)	WDCM 00007; ATCC 13124; ATCC 19408; CCM 5744; CCRC 10913; CCTM La 2957; CCUG 1795; CIP 103409; CN 1491; CNCTC Cl 68/83; DSMZ 756; FIRDI 913; JCM 1290; LMD 89.165; LMG 11264; NCAIM B.01417; NCIMB 6125; NCTC 6125; Schmidt S 107	BAControl-5	990098	990401	990099
		BAControl-10	990131	990402	990132
		BACuanti	990066	990403	990081
		BACuali	990065		
		BACswab	992819		
Clostridium perfringens (CECT 4110)	ATCC 9856; CCTM La 3472; NCTC 6719; A 118	BAControl-5	-	-	-
		BAControl-10	-	-	-
		BACuanti	-	-	992995
		BACuali	-		

[1]The use of this strain is recommended in the set of ISO 11133 Standards

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet) Low (<100)	Intermediate (100-1000)	High (>1000)
Clostridium sporogenes (CECT 797)	ATCC 11437; CCRC 13856; CCTM La 3546; CCUG 31316; CIP 100651; IFO 14293; McClung 2006; NCAIM B.01416; NCIMB 12343	BAControl-5	990215	990404	990217
		BAControl-10	990216	990405	990218
		BACuanti	990219	990406	990220
		BACuali		990214	
Clostridium sporogenes[1] (CECT 485)	WDCM 00008; ATCC 19404; CCM 4409; CCRC 11258; CCTM La 2951; CCUG 7489; CCUG 18371; CIP 79.3; CNCTC Cl 66/79; DSMZ 1664; LMD 85.28; LMG 10143; NCFB 1710; NCIMB 532; Robertson SR5	BAControl-5	990285	990407	990291
		BAControl-10	990286	990408	990292
		BACuanti	990293	990409	990296
		BACuali		990284	
Clostridium tyrobutyricum (CECT 4011)	ATCC 25755; DSM 2637; LMG 1285; VPI 5392	BAControl-5	-	-	992992
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali		-	
Corynebacterium jeikeium (CECT 760)	ATCC 33031; CCUG 28786; Furness 418H	BACuali		992734	
Corynebacterium pseudodiphtheriticum (CECT 755)	ATCC 7091; ATCC 10700; NCTC 11136; Barksdale 10700; CCM 2821; CCRC 10656; CCTM La 3518; CCUG 27539; CIP 103420; CNCTC Psdi 5/78; Coffey 153; GISK 090497; PCM 2051	BACuali		992733	
Cronobacter muytjensii[1] (CECT 9143)	ATCC 51329; LRA 023 07 83; WDCM 00213	BACuali		992786	
Cronobacter sakazakii (CECT 858)	ATCC 29544; CCRC 13988; CDC 4562-70; CDC 78-067947; CIP 103183; CNCTC Eb 20/83; DSM 4485; JCM 1233; Kosako 216; LMG 5740; NCTC 11467; CL783/77; Sakazaki 216; WDCM 00214	BAControl-5	992650	992651	-
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali		992649	
Enterobacter aerogenes[1] (CECT 684 T)	WDCM 00175; ATCC 13048; CCRC 10370; CCTM La 2835; CCUG 1429; CDC 819-56; CIP 60.86; CNCTC Ae 10/86; CUETM 77-29; FIRDI 370; HAMBI 101; HAMBI 1276; IAM 12348; IFO 13534; JCM 1235; Kosako 226; LMG 2094; LMG 2968; NCIMB 10102; NCTC 10006; PCM 532; RIMD 0505001; Sakazaki 226; VTT E-88325	BAControl-5	990380	990410	990381
		BAControl-10	990467	990411	990470
		BACuanti	990468	990412	990471
		BACuali		990469	
		BACswab		992962	

[1]The use of this strain is recommended in the set of ISO 11133 Standards

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet)		
			Low (<100)	Intermediate (100-1000)	High (>1000)
Enterobacter cloacae (CECT 5075)	A8; ATCC 23355; CCUG 33777; LRA001.09.075; WDCM 00082	BACuali	992740		
Enterobacter cloacae (CECT 194)	CCRC 10401; CCTM La 3592; CCUG 6323; CCUG 18448; CCUG 29301; CDC 279-56; CDC 442-68; CIP 60.85; CNCTC Ae 24/83; DSM 30054; FIRDI 401; HAMBI 96; HAMBI 1295; IAM 12349; IFO 13535; IID 977; JCM 1232; LMG 2783; LRA 12.12.81; NCIMB 10101; NCTC 10005; PCM 533; RIMD 0503001; Sakazaki 206; VTT E-84198; WDCM 00083	BAControl-5	-	-	993011
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali	-		
Enterococcus casseliflavus (CECT 8430)	ATCC 700327; 9199	BACuali	992657		
Enterococcus faecalis[1] (CECT 795)	ATCC 29212; CCM 4224; CCRC 10789; CCUG 7739; CCUG 9997; CIP 103214; CNCTC Str 17/88; DSM 2570; JCM 2875; Kaiser-Permanente strain Portland; LMG 8146; LMG 8222; NCIMB 13280; WDCM 00087	BAControl-5	992654	992655	992703
		BAControl-10	992701	992702	992728
		BACuanti	992792	992793	992700
		BACuali	992653		
Enterococcus faecalis[1] (CECT 481 T)	WDCM 00009; ATCC 19433; CCRC 10066; CCUG 19916; CIP 103015; CNCTC Str 3/86; DSMZ 20478; FIRDI 66; HNCMB 80171; JCM 5803; LMG 7937; NCAIM B.01312; NCFB 581; NCTC 775; Tissier; RIMD 3116001; VTT E-93203	BAControl-5	990298	990413	990304
		BAControl-10	990299	990414	990305
		BACuanti	990306	990415	990309
		BACuali	990297		
		BACswab	992965		
Enterococcus faecalis (CECT 8118)	CIP 106877; Bergan strain H; WDCM 00176	BAControl-5	-	-	992980
		BAControl-10	-	-	993006
		BACuanti	-	-	992969
		BACuali	-		
Enterococcus faecium (CECT 410 T)	WDCM 00010; ATCC 19434; CCRC 10067; CCTM La 2367; CCUG 542; CIP 103014; DSMZ 20477; GIFU 8355; JCM 5804; LMG 8149; LMG 11423; NCFB 942; NCIMB 11508; NRIC 1145; strain OJ; VTT E-93204	BAControl-5	990096	990416	990097
		BAControl-10	990133	990417	990134
		BACuanti	990064	990418	990080
		BACuali	990063		

[1]The use of this strain is recommended in the set of ISO 11133 Standards

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet) Low (<100)	Intermediate (100-1000)	High (>1000)
Enterococcus faecium[1] (CECT 8108)	ATCC 6057; CCM 2308; CIP 106742; DSM 2146; LMG 15709; NCIMB 8842; Sherman 24; WDCM 00177	BAControl-5	992756	992758	992725
		BAControl-10	992757	992759	992726
		BACuanti	992803	992804	992805
		BACuali		992656	
Enterococcus hirae (CECT 4081)	ATCC 10541; CCRC 11547; CCUG 32258; CECT 214; CIP 58.55; CNCTC Str 6/58; DSM 3320; FDA M19; IAW 143; LMG 10274; NCIMB 8192; PCI 1341; WDCM 00011	BAControl-5	-	-	992771
		BAControl-10	-	-	992772
		BACuanti	-	-	-
		BACuali		992779	
Escherichia coli[1, 2] (CECT 516)	WDCM 00012; ATCC 8739; CCRC 11634; CCTM La 2194; CCUG 10979; CIP 53.126; DSMZ 1576; Crooks; IFO 3972; IMET 11121; LMG 8063; NCFB 904; PCM 2561; VTT E-76039	BAControl-5	990169	990419	990171
		BAControl-10	990170	990420	990172
		BACuanti	990173	990421	990174
		BACuali		990168	
		BACswab		992814	
Escherichia coli[1] Recommended for assays based on defined substrate methods (CECT 515 T)	WDCM 00090; ATCC 11775; NCTC 9001 BTCC U5/41; CAPM 6101; CCM 5172; CCRC 10675; CCTM La 2067; CCUG 24; CIP 54.8; CN 4382; CNCTC Eck 58/59; CNCTC Eck 206/59; DSMZ 30083; FIRDI 675; GISK 240001; IAM 12119; JCM 1649; Kauffmann U 5/41; LMD 54.8; LMG 2092; NCFB 1989; NCIMB 11943; PCM 172; PCM 321; SSIC U 5/41; USCC 2054	BAControl-5	990496	990499	990502
		BAControl-10	990497	990500	990503
		BACuanti	990498	990501	990504
		BACuali		990505	
Escherichia coli[1] (CECT 434)	WDCM 00013; ATCC 25922; CCM 3954; CCRC 14902; CCTM La 2184; CCUG 7736; CCUG 17620; CCUG 21456; CIP 76.24; CNCTC Ec 327/73; DSM 1103; FDA Seattle 1946; GISK 240533; HER 1176; IFO 15034; JCM 5491; LMG 8223; NCIMB 12210; PCM 2057	BAControl-5	990094	990422	990095
		BAControl-10	990135	990423	990136
		BACuanti	990062	990424	990079
		BACuali		990061	
Escherichia coli (CECT 405)	ATCC 10536; NCTC 10418; PC1-540; WHO-5; strain Macleod	BAControl-5	992538	992539	992540
		BAControl-10	992541	992542	992543
		BACuanti	992556	992557	992558
		BACuali		992524	
		BACswab		992990	

[1] The use of this strain is recommended in the set of ISO 11133 Standards

[2] This strain is also available for use in the pharmaceutical industry according to the European Pharmacopoeia. Check references in ielab's Pharma section.

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet)		
			Low (<100)	Intermediate (100-1000)	High (>1000)
Escherichia coli[1] (CECT 8296)	NCTC 13167; WDCM 00179; WR1	BAControl-5	992986	992970	992742
		BAControl-10	-	992971	-
		BACuanti	-	-	-
		BACuali	-		
Escherichia coli h (CECT 9153)	WDCM 00202; NCTC 13216; CCM 7395	BAControl-5	992544	992545	992546
		BAControl-10	992547	992548	992549
		BACuanti	992559	992560	992561
		BACuali	992522		
Escherichia coli K12 (CECT 433)	CCTM La 2193; CIP 54.117; IFO 3301; Lederberg K12; NCTC 10538; PCM 2560; K12	BAControl-5	-	-	992632
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali	992778		
Escherichia coli O157:H7 (CECT 4972)	ATCC 700728; NCTC 12900; CCM 4787; JCM 18426; LMG 21756; LMG 21763; VTT E-011782; WDCM 00014	BACuali	992658		
Eurotium rubrum (CECT 20808)	WDCM 00184; ATCC 42690; FRR 1968; IAM 13896; JCM 22919	BACuali	992509		
Fluoribacter bozemanae (CECT 7276)	ATCC 33217; CCUG 11880; NCTC 11368	BAControl-5	-	992745	992790
		BAControl-10	-	992746	992791
		BACuanti	-	-	-
		BACuali	-		
Geobacillus stearothermophilus (CECT 43)	ATCC 12980; CCEB 641; CCM 2062; CCRC 11092; CCUG 26241; CNCTC Bac 11/83; DSM 22; IAM 11062; IAW 132; IFO 12550; JCM 2501; LMD 75.19; LMG 6939; NCA 26; NCFB 1768; NCIMB 8923; NCTC 10339; NRRL B-1172; NRRL NRS-T18; PCM 2104; strain Donk; USCC 1621; VKM 510; VTT E-81128	BACswab	992967		
Hafnia alvei[1] (CECT 158)	ATCC 13337; NCTC 8105; CCUG 15720; CDC 434-68; CIP 57.31; CNCTC Ha 3/68; DSM 30163; GISK 245530; JCM 1666; NCIMB 11999; PCM 537; Stuart 32011; WDCM 00095	BACuali	992785		

[1]The use of this strain is recommended in the set of ISO 11133 Standards

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet)		
			Low (<100)	Intermediate (100-1000)	High (>1000)
Klebsiella oxytoca (CECT 860 T)	ATCC 13182; CCRC 13985; CCUG 20633; CIP 103434; CNCTC Klp 92/83; CUETM 77-113; DSM 5175; Jain 497-2; JCM 1665; Kosako 82060; LMG 3055; NBRC 105695; NCIMB 12259; RH 497-2; Sakazaki 181	BAControl-5	990343	990425	990349
		BAControl-10	990344	990426	990350
		BACuanti	990351	990427	990354
		BACuali	990342		
Klebsiella variicola[1] (*pneumoniae*)	WDCM 00206	BAControl-5	990680	990683	990686
		BAControl-10	990681	990684	990687
		BACuanti	990682	990685	990688
		BACuali	990689		
Klebsiella pneumoniae (CECT 143)	API 0120873; ATCC 13883; NCTC 9633; CCRC 10692; CCTM La 1906; CCUG 225; CDC 298-53; CIP 82.91; CUETM 78-55; CUETM 78-60; CUETM 79-299; DSM 30104; FIRDI 692; GIFU 2924; IAM 12351; IFO 14940; JCM 1662; KM 2924; Kosako 82057; LMG 2095; LMG 3132; LMG 3508; LMG 3509; NCIMB 13281; WDCM 00097	BAControl-5	992688	992689	992766
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali	-		
Klebsiella pneumoniae (CECT 8453)	ATCC 4352; CECT 5307; CIP 104216; IAM 12015; LMG 3128; NCIB 10341; WDCM 00192	BAControl-5	992690	992691	
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali	992802		
Kocuria rhizophila (CECT 241)	ATCC 9341; CCM 552; CCUG 10782; DSM 348; FDA PCI 1001; FIRDI 449; HNCMB 117001; IAM 1099; IFO 12708; IMET 10397; LMG 8194; LMG 8764; LMG 8789; LMG 8816; NCDO 758; NCIMB 8553; NCTC 8340; USCC 1935	BACuali	992623		
Lactobacillus acidophilus (CECT 903)	ACA-DC 0111; ATCC 4356; CCRC 10695; CCUG 5917; CIP 76.13; DSM 20079; FIRDI 695; HAMBI 84; Hansen L917; IFO 13951; IID 893; IMET 10710; JCM 1132; Kulp SCAV; LMG 7943; LMG 8150; LMG 9433; NCIMB 8690; NRRL B-4495; Rogosa 210X; VPI 6032; VTT E-87276; WDCM 00098	BACuali	992659		
Lactobacillus brevis[1] (CECT 4121)	ATCC 14869; CCM 3805; CCRC 12187; CCUG 30670; CIP 102806; DSM 20054; Hausen Bb14; IMET 10711; JCM 1059; LMG 6906; LMG 7944; NCFB 1749; NZCC 20070; VTT E-91458; WDCM 00099	BACuali	992783		
		BACswab	992964		

[1] The use of this strain is recommended in the set of ISO 11133 Standards

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet)		
			Low (<100)	Intermediate (100-1000)	High (>1000)
Lactobacillus casei[1] (CECT 475)	ATCC 393; CCRC 10697; CCTM La 3034; CCUG 21451; FIRDI 697; HAMBI 85; Hucker O3; IAM 12473; IID 892; JCM 1134; LMG 6904; LMG 9190; NCFB 161; NCIMB 11970; Orla-Jensen 7; Orland L-323; Tittsler 303; VTT E-85225; WDCM 00100	BACuali	992787		
Lactobacillus delbrueckii* subsp. *bulgaricus[1] (CECT 4005)	ATCC 11842; CCRC 10696; CCUG 21450; CIP 101027; DSM 20081; FIRDI 696; Hansen Lb14; IAM 12472; IFO 13953; IMET 10708; IPCR S1-3; JCM 1002; LMD 46.76; LMG 6901; NCIMB 11778; WDCM 00102	BACuali	992782		
Lactobacillus delbrueckii* subsp. *lactis (CECT 282)	ATCC 7830; BUCSAV 244; CCM 2772; CCRC 11051; CCRC 14067; CCTM La 1131; CCUG 19776; CIH 924; CIP 53.61; CNCTC 7; CSCC 3100; DSM 20355; FIRDI 1051; IAM 12066; IFO 3376; JCM 1557; LMD 49.7; LMG 6401; McCoy Ld5; NCFB 302; PCM 2603; Tittsler 313; USDA 313	BACuali	992630		
Lactobacillus plantarum (CECT 748)	ATCC 14917; CCRC 10069; CCUG 30503; CIP 103151; HAMBI 72; Lp39; IAM 12477; JCM 1149; LMG 6907; LMG 7945; NBRC 15891; NCFB 1752; NCIMB 11974; NRRL B-4496; Orla-Jensen 39; VTT E-79098; WDCM 00104	BACuali	992788		
Lactobacillus sakei (CECT 906)	ATCC 15521; CCRC 14622; CCTM La 3783; CCUG 30501; CIP 103139; DSM 20017; IFO (now NBRC) 15893; JCM 1157; Kitahara TS37; LMG 9468; LMG 11718; NCIMB 13090; NRIC 1071; WDCM 00015	BAControl-5	992822	992823	992829
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali	992797		
Lactococcus lactis[1] (CECT 185 T)	WDCM 00016; ATCC 9936; ATCC 19435; Bridge PB48; Bridge PB93; BUCSAV 302; Cayeux N30; CCM 1877; CCRC 12312; CCTM La 3436; CCUG 7980; CCUG 32211; CIP 70.56; CNCTC Str 25/58; DSMZ 20481; Feltham K466; HNCMB 80146; IMET 10699; JCM 5805; Jones W59; Lancefield C559; LMG 6890; NCFB 604; NCTC 6681; Shattock lactis OJ; USCC 1394; VTT E-90395	BAControl-5	992592	992593	992594
		BAControl-10	992595	992596	992597
		BACuanti	992598	992599	992600
		BACuali	992601		
Legionella anisa[1] Recommended for ISO 11731 Standard tests (cellulose ester membrane filters) (CECT 8177 T)	WDCM 00106; ATCC 35292; NCTC 11974	BAControl-5	990526	990529	990532
		BAControl-10	990527	990530	990533
		BACuanti	990528	990531	990534
		BACuali	990535		

[1]The use of this strain is recommended in the set of ISO 11133 Standards

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet) Low (<100)	Intermediate (100-1000)	High (>1000)
Legionella anisa[1] **polycarbonate** Recommended for ISO 11731 Standard tests (polycarbonate/nylon/ polyethersulfone-PES membrane filters) (CECT 8177 T)	WDCM 00106; ATCC 35292; NCTC 11974	BAControl-5	-	-	990537
		BAControl-10	-	-	990538
		BACuanti	-	-	990536
		BACuali	-		
Legionella bozemanae (*Fluoribacter bozemanae*) (CECT 7276)	ATCC 33217; CCUG 11880; NCTC 11368	BAControl-5	-	992745	992790
		BAControl-10	-	992746	992791
		BACuanti	-	-	-
		BACuali	-		
Legionella jordanis Recommended for ISO 11731 Standard tests (cellulose ester membrane filters). (NCTC 11533)	ATCC 33623; BL 540	BAControl-5	990124	990431	990125
		BAControl-10	990139	990432	990140
		BACuanti	990127	990433	990128
		BACuali	990126		
Leg. jordanis **polycarbonate** Recommended for ISO 11731 Standard tests (polycarbonate/nylon/ polyethersulfone-PES membrane filters). (NCTC 11533)	ATCC 33623; BL 540	BAControl-5	-	-	990495
		BAControl-10	-	-	990494
		BACuanti	-	-	990493
		BACuali	-		
Legionella longbeachae (CECT 9955 T)	ATCC 33462; Long Beach 4; NCTC 11477	BACuali	992631		
Legionella pneumophila **sg.1**[1] Recommended for ISO 11731 Standard tests (cellulose ester membrane filters). (CECT 7109 T)	WDCM 00107; ATCC 33152; Philadelphia 1; CCUG 9568; DSM 7513; JCM 7571; NCTC 11192	BAControl-5	990102	990428	990103
		BAControl-10	990137	990429	990138
		BACuanti	990073	990430	990078
		BACuali	990072		

[1] The use of this strain is recommended in the set of ISO 11133 Standards

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet) Low (<100)	Intermediate (100-1000)	High (>1000)
***Leg.pneumophila* sg.1[1] polycarbonate** Recommended for ISO 11731 Standard tests (polycarbonate/nylon/ polyethersulfone-PES membrane filters). (CECT 7109 T)	WDCM 00107; ATCC 33152; Philadelphia 1; CCUG 9568; DSM 7513; JCM 7571; NCTC 11192	BAControl-5	-	-	990477
		BAControl-10	-	-	990478
		BACuanti	-	-	990077
		BACuali	-		
***Legionella pneumophila* sg.4[1]** (CECT 8343)	Los Angeles-1; ATCC 33156; NCTC 11233; WDCM 00180	BAControl-5	992661	992662	-
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali		992660	
***Legionella pneumophila* sg.5** Recommended for ISO 11731 Standard tests (cellulose ester membrane filters). (CECT 7274)	ATCC 33216; CCUG 13399; Dallas 1E	BAControl-5	990482	990484	990486
		BAControl-10	990483	990485	990487
		BACuanti	990488	990489	990490
		BACuali		990481	
***Legionella pneumophila* sg.5 polycarbonate** Recommended for ISO 11731 Standard tests (polycarbonate/nylon/ polyethersulfone-PES membrane filters). (CECT 7274)	ATCC 33216; CCUG 13399; Dallas 1E	BAControl-5	-	-	992776
		BAControl-10	-	-	992777
		BACuanti	-	-	992775
		BACuali		-	
Limosilactobacillus reuteri (CECT 925 T)	ATCC 23272; CCRC 14625; CCUG 33624; CIP 101887; DSM 20016; Hansen F275; IFO (now NBRC) 15892 ; JCM 1112; LMG 9213; NCIMB 11951; NRRL B-14171; Reuter F275; VTT E-92142	BACuali		992996	
Listeria innocua (CECT 910 T)	WDCM 00017; ATCC 33090; CCM 4030; CCRC 14843; CCTM La 2676; CIP 80.11; CNCTC Li 71/89; DSMZ 20649; LMG 11387; NCTC 11288; Seeliger Li 58; SLCC 3379	BAControl-5	992572	992573	992574
		BAControl-10	992575	992576	992577
		BACuanti	992578	992579	992580
		BACuali		992581	

[1]The use of this strain is recommended in the set of ISO 11133 Standards

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet) Low (<100)	Intermediate (100-1000)	High (>1000)
Listeria ivanovii (CECT 913)	ATCC 19119; CCM 5884; CCRC 14844; CCTM La 2680; CIP 78.42; Donker-Voet 74a; DSM 20750; LMG 11388; NCTC 11846; Seeliger Li 1979; SLCC 2379; strain SV5; WDCM 00018	BACuali		992663	
Listeria monocytogenes (CECT 935)	WDCM 00021; ATCC 13932; CCM 5580; CCTM La 1206; CIP 59.53; CNCTC Li 19/58; IID 581; NCTC 10527; Paterson 1071; SLCC 2375	BAControl-5	990113	990434	990114
		BAControl-10	990141	990435	990142
		BACuanti	990119	990436	990118
		BACuali		990117	
Listeria monocytogenes (CECT 5366)	ATCC 19115 ;CIP 78.38; SLCC 2375; strain Li2	BAControl-5	992562	992563	992564
		BAControl-10	992565	992566	992567
		BACuanti	992568	992569	992570
		BACuali		992571	
Listeria monocytogenes (CECT 5873)	ATCC 35152; NCTC 7973; WDCM 00109	BACuali		992666	
Listeria monocytogenes	ATCC 7644; NCTC 13372	BAControl-5	-	992626	-
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali		992664	
Listeria monocytogenes **serovar 4b** (CECT 4032)	NCTC 11994; F.646/86; WDCM 00019	BAControl-5	992668	992669	-
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali		992667	
Micrococcus luteus (CECT 5863 T)	WDCM 00111; ATCC 4698; CCM 169; CECT 51; CECT 5053; CIP A270; DSM 20030; HAMBI 26; HAMBI 1399; IEGM 391; JCM 1464; LMG 4050; NBRC 3333; NCCB 78001; NCTC 2665; NCIB 9278; NRRL B-287; VKM B-1314	BAControl-5	990356	990437	990362
		BAControl-10	990357	990438	990363
		BACuanti	990364	990439	990367
		BACuali		990355	
Micrococcus luteus (CECT 245)	ATCC 10240; BUCSAV 392; CCM 732; CCUG 21988; CIP 53.160; DSM 1790; FDA 16; FIRDI 452; IFO 3242; IMET 10759; LMG 3293; NCTC 7743; PCI 1216; Stanley 130.21; USCC 1529	BACuali		992624	

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet)		
			Low (<100)	Intermediate (100-1000)	High (>1000)
Moraxella catarrhalis (CECT 8634)	HCUV-405055	BACuali	992735		
Mucor racemosus (CECT 20821)	WDCM 00181; ATCC 42647; CBS 906.69; CCUG 33992; CCUG 34352	BACuali	992510		
Proteus hauseri (CECT 484)	NCTC 4175; ATCC 13315; HAMBI 91; IFO (now NBRC) 3851; NCIB (now NCIMB) 4175; NRRL B-3405	BACuali	992985		
Proteus mirabilis (CECT 5350)	NCDC 2059-70; ATCC 25933	BACuali	992670		
Proteus mirabilis[1] (CECT 4168)	ATCC 29906; CCRC 13991; CCUG 26767; CDC PR14; CIP 103181; LMG 3257; NCTC 11938; WDCM 00023	BACuali	992671		
Proteus mirabilis (CECT 4101)	ATCC 14153; CCTM La 2798; CCUG 32232; CIP 104032; CNCTC Prmi 27/79; DSM 788; FDA PCI 765; IMET 11232; LMG 9077; VTT E-85229	BACuali	992741		
Pseudomonas aeruginosa[1, 2] (CECT 111)	WDCM 00026; ATCC 9027; BUCSAV 278; CCM 1961; CCRC 11633; CCTM La 3362; CCUG 22801; CIP 82.118; CNCTC Ps 37/65; DSMZ 1128; DSMZ 1385; Hugh 813; IAM 10374; IFO 13275; IMET 10905; LMG 8029; NRRL B-800; PCM 2562; RH 813;	BAControl-5	990183	990440	990185
		BAControl-10	990184	990441	990186
		BACuanti	990187	990442	990188
		BACuali	990182		
		BACswab	992816		
Pseudomonas aeruginosa[1] (CECT 110 T)	WDCM 00024; ATCC 10145; AJ 2116; BUCSAV 277; CCEB 481; CCEB 766; CCM 481; CCM 1960; CCRC 10944; CCTM La 2773; CCUG 551; CCUG 28447; CCUG 29297; CFBP 2466; CIP 100720; CNCTC Ps 153/77; DSMZ 50071; FIRDI 944; GISK 190154; HAMBI 25; IAM 1514; ICPB 2523; IFO (now NBRC) 12689 ; IMET 10403; IMET 12689; JCM 5962; KM 274; Kosako 85002; LMD 76.39; LMG 1242; NCFB 1369; NCPPB 1965; NCTC 10332; NRRL B-771; PCM 499; PD 971; PD 1816; RH 815; UQM 495; USCC 2030; VKM B-588; VTT E-75041	BAControl-5	990506	990509	990512
		BAControl-10	990507	990510	990513
		BACuanti	990508	990511	990514
		BACuali	990515		

[1] The use of this strain is recommended in the set of ISO 11133 Standards

[2] This strain is also available for use in the pharmaceutical industry according to the European Pharmacopoeia. Check references in ielab's Pharma section.

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet) Low (<100)	Intermediate (100-1000)	High (>1000)
Pseudomonas aeruginosa[1] (CECT 108)	WDCM 00025; ATCC 27853; CCM 3955; CCRC 11864; CCTM La 2766; CCUG 1423; CCUG 17619; CIP 76.110; CNCTC Ps 162/78; DSMZ 1117; GISK 190127; Hansen H50; LMD 89.161; LMD 90.9; LMG 6395; Medeiros Boston 41501; NCIMB 12469	BAControl-5	990106	990443	990107
		BAControl-10	990143	990444	990144
		BACuanti	990092	990445	990091
		BACuali	990089		
Pseudomonas aeruginosa (CECT 4080)	CIP A22; LMG 10639; NCIMB 13056; WDCM 00027	BACuali	992637		
Pseudomonas aeruginosa (CECT 4122)	ATCC 15692; ATCC 17503; ATCC 25247; ATCC 25375; CIP 104116; Holloway 1C; Kemira Oy; LMG 12228; PRS 101; Stanier 131; strain PAO1; VTT E-84219	BACuali	992991		
Pseudomonas fluorescens (CECT 378 T)	WDCM 00115; ATCC 13525; CCEB 488; CCEB 546; CCEB 762; CCM 2115; CCRC 11028; CCTM La 3364; CCUG 1253; CFBP 2102; CIP 69.13; CNCTC Ps 154/77; DSM 50090; HAMBI 27; HNCMB 173001; Hugh 818; IAM 12022; ICPB 3200; IFO 14160; IMET 10619; IFO (now NBRC) 14160; JCM 5963; Kado 11D42; LMG 1794; NCFB 1524; NCPPB 1964; NCTC 10038; Rhodes 28/5; Stanier 193; VKM 894; VTT E-93443	BAControl-5	990378	990446	990379
		BAControl-10	990472	990447	990475
		BACuanti	990473	990448	990476
		BACuali	990474		
		BACswab	992966		
Raoultella planticola (CECT 843)	ATCC 33531; CCRC 13986; CCUG 15718; CDC 4245-72; CIP 100751; CNCTC KI 2/83; CUETM 83-94; DSM 3069; IFO 14939; JCM 7251; Seider V-236	BACuali	992736		
Raoultella terrigena (CECT 4519)	ATCC 33257; CCM 3568; CCRC 14805; CIP 80.7; CNCTC KI 1/83; CUETM 77-176; DSM 2687; Gavini L84; IFO 14941; JCM 1687; Kosako 82083; Leclerc 77-176; LMG 3222; NCIMB 12053; Sakazaki 496	BACuali	992737		
Rhodococcus hoagii (equi) (CECT 555)	AJ 1402; ATCC 6939; ATCC 25729; CCM 3429; CCRC 12859; CCTM La 3501; CCUG 892; CCUG 20987; CCUG 23606; CIP 54.72; DSM 43349; Goodfellow R 71; Gordon 1621; IAM 12426; IFO 14956; IMET 7467; JCM 1311; LMG18452; Magnusson strain Foal; NBRC 101255; NCIMB 12828; NCTC 1621; NRRL B-16538; PCM 559; Suzuki CNF 002; WDCM 00028	BACuali	992672		

[1] The use of this strain is recommended in the set of ISO 11133 Standards

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet) Low (<100)	Intermediate (100-1000)	High (>1000)
Saccharomyces cerevisiae (CECT 1317)	ATCC 24904; ATCC 9080; AJ 4033; B 24819; CBS 2354; CCRC 20855; CCTM La 2891; CCY 48-76; CNCTC 57/87; DBVPG 6248; DSMZ 70424; Hillman Hospital 4228; IAM 4206; IFO 0565; IHEM 3963; IP 2046.92; JCM 2223; NCYC 74; NRRL Y-1089; VKPM T 830; VTT A-66065; Windisch Sa-0607	BAControl-5	992611	992612	992613
		BAControl-10	992614	992615	992616
		BACuanti	992617	992618	992619
		BACuali		992525	
Saccharomyces cerevisiae (CECT 1383)	WDCM 00058; ATCC 9763; B 42428; CBS 2978; CBS 5900; CCRC 20822; CCTM La 2895; CCY 21-4-48; CNCTC 51/65; DSMZ 1333; IAW 39; IHEM 3961; LCP 86.3379; LOCK 9; MUCL 30115; NCPF 3191; NCTC 7239; NCTC 10716; NCYC 87; NRRL Y-567; PCI M-50; UMIP 1432.83; VTT C-94203	BAControl-5	992532	992533	992534
		BAControl-10	992535	992536	992537
		BACuanti	992553	992554	992555
		BACuali		992521	
***Salmonella enterica* subsp. *enterica* serovar Abony** (CECT 545)	WDCM 00029; NCTC 6017; CCTM La 2697; CCUG 21354; CIP 80.39; CNCTC SK 103; DSM 4224; PCM 2564; 74	BAControl-5	990201	990452	990203
		BAControl-10	990202	990453	990204
		BACuanti	990205	990454	990206
		BACuali		990200	
***Salmonella enterica* subsp. *enterica* serovar Enteritidis**[1] (CECT 4300)	ATCC 13076; ATCC 25928; CCRC 10744; CDC K-1891; CNCTC SK 64; DSM 9898; DSM 17420; Kauffmann 1891; LMG 10395; WDCM 00030	BAControl-5	992633	992634	992627
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali		992673	
***Salmonella enterica* subsp. *enterica* serovar Typhimurium**[1] (CECT 4594)	WDCM 00031; ATCC 14028; CCRC 10747; CDC 6516-60; CIP 104115; NCIMB 13284	BAControl-5	990194	990455	990196
		BAControl-10	990195	990456	990197
		BACuanti	990198	990457	990199
		BACuali		990193	
		BACswab		992821	
***Salmonella enterica* subsp. *enterica* serovar Typhi** (CECT 409 T)	ATCC 19430; CCRC 12948; CIP 55.35; CNCTC Ta 19/45; CNCTC Ta 27/56; Felix Ty2; PCM 1901	BAControl-5	990111	990449	990112
		BAControl-10	990145	990450	990146
		BACuanti	990110	990451	990109
		BACuali		990090	

[1]The use of this strain is recommended in the set of ISO 11133 Standards

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet) Low (<100)	Intermediate (100-1000)	High (>1000)
Shigella flexneri (CECT 4804)	ATCC 12022; CCRC 10772; CDC strain 3591-52; CIP 104222; NCTC 12698; WDCM 00126	BACuali	992674		
Shigella flexneri[1] (CECT 8175)	ATCC 29903; CCUG 56439; CIP 82.48; DSM 4782; WDCM 00125	BACuali	992781		
Shigella sonnei (CECT 4631)	ATCC 25931; CCUG 32351; CDC 1120-66; CIP 104223	BAControl-5	992676	992677	-
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali	992675		
Shigella sonnei[1] (CECT 4887)	ATCC 29930; DSM 5570; NCTC 12984; strain I virulent; WDCM 00127	BACuali	992780		
Staphylococcus aureus[1, 2] (CECT 239)	WDCM 00032; ATCC 6538; CCRC 12154; CCTM La 2103; CCUG 10778; CIP 4.83; CNCTC Mau 29/58; DSMZ 799; FDA 209; FIRDI 941; HMGB B865; IAW 34; IFO 13276; IMET 10761; LMD 46.64; LMG 8064; NCTC 10788; VTT E-70045	BAControl-5	990176	990458	990178
		BAControl-10	990177	990459	990179
		BACuanti	990180	990460	990181
		BACuali	990175		
		BACswab	992815		
Staphylococcus aureus (CECT 240)	ATCC 6538P; AHU 1142; BUCSAV 395; CCM 2022; CCRC 10451; CCTM La 596; CCUG 1828; CIP 53.156; CN 3784; CNCTC Mau 28/58; DSM 346; FDA 209P; FIRDI 451; GISK 201108; IAM 1011; IAM 12082; IAW 35; IFO 3061; IFO 12732; IID 671; IL 29; IMET 10904; IW 35; JCM 2151; LMD 72.46; LMG 8195; NCFB 1963; NCIMB 8625; NCTC 7447; NRRL B-313; OUT 8232; PCI 1209; PCM 520; PCM 1842; PCM 1932; PCM 2204; PZH 8/54; RIA 209P; RIMD 3109007; WDCM 00033; WDCM 00195	BACswab	992968		
Staphylococcus aureus[1] (CECT 435)	WDCM 00034; ATCC 25923; CCM 3953; CCRC 10781; CCTM La 2816; CCTM La 3561; CCUG 7738; CCUG 17621; CIP 76.25; CNCTC Mau 80/73; DSMZ 1104; FDA Seattle 1945; GISK 201189; IFO 14462; JCM 2413; LMD 90.23; LMG 8224; NCIMB 12702; PCM 2054	BAControl-5	990104	990461	990105
		BAControl-10	990147	990462	990148
		BACuanti	990087	990463	990088
		BACuali	990086		
Staphylococcus aureus (CECT 5190)	ATCC 43300; CCM 4750; DSM 13661; Thornsberry F-182; WDCM 00211	BACuali	992762		

[1] The use of this strain is recommended in the set of ISO 11133 Standards

[2] This strain is also available for use in the pharmaceutical industry according to the European Pharmacopoeia. Check references in ielab's Pharma section.

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet)		
			Low (<100)	Intermediate (100-1000)	High (>1000)
Staphylococcus aureus (CECT 5192)	ATCC 27664; Bergdoll FRI-326; DSM 18589	BACuali	992763		
Staphylococcus aureus (CECT 9951)	ATCC 33591; Schaefler 328	BACuali	992682		
Staphylococcus aureus (CECT 794)	ATCC 29213; CCM 4223; CCRC 11863; CCUG 15915; CIP 103429; CNCTC Mau 127/90; DSM 2569; Gerlach strain Wichita; IFO 15035; JCM 2874; LMD 90.24; LMG 10147; NIHJ 85047; WDCM 00131	BACuali	992681		
Staphylococcus aureus (NCTC 10804)	502 A; ATCC 27217	BACuali	992680		
Staphylococcus epidermidis[1] (CECT 232 T)	WDCM 00132; ATCC14990; AMIF strain Fussel; BTCC 2124; CCM 2124; CCRC 10785; CCTM La 2817; CCUG 18000; CIP 81.55; DSM 20044; GISK 202001; IAM 12013; JCM 2414; LMG 10474; NCAIM B.01066; NCIMB 12721; NCTC 11047; PCM 2118; Hugh RH 2466	BAControl-5	990328	990464	990334
		BAControl-10	990329	990465	990335
		BACuanti	990332	990466	990338
		BACuali	990341		
Staphylococcus epidermidis (CECT 231)	ATCC 12228; CCM 4418; CCRC 11030; CCTM La 1724; CIP 68.21; CNCTC M 12/63; DSM 1798; FDA PCI 1200; IAM 12012; IFO 12993; IW 1533; LMG 10273; WHO 12; WDCM 00036	BAControl-5	-	-	990479
		BAControl-10	-	-	990480
		BACuanti	-	-	-
		BACuali	992679		
Staphylococcus saprophyticus (CECT 235 T)	WDCM 00159; ATCC 15305; ATCC 19701; CCM 883; CCRC 10786; CCTM La 2818; CCUG 3706; CIP 76.125; Cowan S-41; GISK 203001; JCM 2427; LMD 73.11; NCAIM B.01067; NCFB 948; NCIMB 8711; NCTC 7292; PCM 2109	BAControl-5	992526	992527	992528
		BAControl-10	992529	992530	992531
		BACuanti	992550	992551	992552
		BACuali	992520		
Streptococcus agalactiae (CECT 183)	ATCC 13813; NCTC 8181; CCRC 10787; CCUG 4208; CIP 103227; DSM 2134; JCM 5671; NCFB 1348; Stableforth G19	BACuali	992765		
Streptococcus dysgalactiae (CECT 758)	N35; NCTC 4335	BACuali	992748		
Streptococcus oralis (CECT 907)	ATCC 35037; NCTC 11427; Bridge & Sneath 182; Carlsson LVG/1; CCUG 13229; CCUG 24891; CCRC 14749; CIP 102922; DSM 20627; LMG 14532; NCFB 2680	BACuali	992738		

[1] The use of this strain is recommended in the set of ISO 11133 Standards

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet)		
			Low (<100)	Intermediate (100-1000)	High (>1000)
Streptococcus pneumoniae (CECT 8737)	ATCC 49619; NCTC 12977; CIP 104340	BAControl-5	-	-	992640
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali	-		
Streptococcus pyogenes (CECT 191)	CIP 104226; ATCC 19615; NCIMB 13285; Wittler strain Bruno	BAControl-5	992760	-	992639
		BAControl-10	992761	-	992774
		BACuanti	-	-	-
		BACuali	993008		
Streptococcus salivarius (CECT 805)	ATCC 7073; CCUG 11878; CIP 102503; DSM 20560; GIFU 8326; IID 5223; IMET 3163; JCM 5707; LMG 11489; NCFB 1779; NCTC 8618; New York State Dept. Hlth. 275	BAControl-5	-	-	992638
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali	-		
Streptococcus salivarius* subsp. *thermophilus (CECT 986)	ATCC 19258; CCRC 13869; CCTM La 3104; CIP 102303; CNCTC Str 28/89; DSM 20617; LMG 6896; NCFB 573; NCTC 12958; strain B of R; USCC 2083; WDCM 0013	BACuali	992683		
Streptococcus uberis (CECT 994)	ATCC 19436; CCRC 12579; CCUG 17930; CIP 103219; CNCTC Str 10/63; JCM 5709; LMG 9465; NCFB 2038; NCTC 3858	BACuali	992747		
Vibrio parahaemolyticus (CECT 9114)	CCUG 67717; NCTC 10885; Truro 69/61527; WDCM 00185	BACuali	993007		
Vibrio vulnificus (CECT 529)	Baumann strain 324; CCRC 12905; CCUG 13448; CCUG 16394; CDC 9107-79; CIP 75.4; DSM 10143; GIFU 3034; JCM 3725; LMG 7898; LMG 13545; NBRC 15645; NCIMB 2046; WDCM 00139	BAControl-5	-	-	992993
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali	-		
Wallemia mellicola (CECT 20820)	WDCM 00182; ATCC 42694; DSM 101886; FRR 1471	BAControl-5	-	-	992635
		BAControl-10	-	-	992636
		BACuanti	-	-	-
		BACuali	992511		

Strain (traceability)	Other collections	Format	Concentration (cfu/tablet)		
			Low (<100)	Intermediate (100-1000)	High (>1000)
Yersinia aldovae (CECT 4314)	Aldova 19955; ATCC 35236; CDC 669-83; CIP 103162; CNCTC Y 67/90; Huntley-Carter CNY 6005; IP 6005; JCM 5892	BACuali	992739		
Yersinia (CECT 4317)	ATCC 29909; Botone 48; Brenner 48; CCM 3558; CCUG 11292; Chester 48; CIP 80.28; CNCTC Y 46/83; JCM 7579; Mollaret CNY 3953; NCTC 11469; WDCM 00217	BACuali	992984		
Yersinia enterocolitica (CECT 9144)	DSM 13030; Y11; WDCM 00216	BAControl-5	992685	992686	-
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali	992684		
Yersinia enterocolitica (CECT 8263)	Billups 1803-68; NCTC 10598; CIP 111053; WDCM 00160	BACuali	992687		

Water BAControl Selection

ielab has Quantitative Reference Material Packs for the microorganisms commonly used for water analysis carried out in testing laboratories. They are specially designed to perform internal quality controls in terms of precision: process control, control charts and quality control of culture media. The expressed concentration is calculated by dissolving one tablet in 20 mL of sterile water.

	Water Analysis Pack	
Material	**BAControl -10** containing 2 tablets per strain	
Strain (traceability)	***Citrobacter freundii*** traceable to CECT 4626 ***Clostridium perfringens*** traceable to CECT 376 T ***Enterococcus faecium*** traceable to CECT 410 T ***Escherichia coli*** traceable to CECT 434 (4 tablets)	
Reference	Concentration of <100 cfu/tablet	990283
	Concentration of >1,000 cfu/tablet	990327

BACredi Line

ielab is an Accredited Reference Material Producer according to ISO 17034 Standard, for the BACredi materials listed in the table below. The use of accredited microbiological reference materials, with all the technical requirements that their production entails, will be very useful for the quality controls carried out in laboratories.

The concentration is calculated by dissolving one tablet in 20mL of sterile water, following the User Guide that is provided with the product.

			Concentration (cfu/tablet)		
Strain (traceability)	Other collections	Format	Low (<100)	Intermediate (100-1000)	High (>1000)
Citrobacter freundii (CECT 4626)	WDCM 00077; NCTC 6272; NCIMB 8645; strain B	BACredi BC-5	990549	990552	990555
		BACredi BC-10	990550	990553	990556
		BACredi BQ	990551	990554	990557
		BACredi BL		990558	
Clostridium perfringens (CECT 376 T)	WDCM 00007; ATCC 13124; ATCC 19408; CCM 5744; CCRC 10913; CCTM La 2957; CCUG 1795; CIP 103409; CN 1491; CNCTC Cl 68/83; DSMZ 756; FIRDI 913; JCM 1290; LMD 89.165; LMG 11264; NCAIM B.01417; NCIMB 6125; NCTC 6125; Schmidt S 107	BACredi BC-5	990569	990572	990575
		BACredi BC-10	990570	990573	990576
		BACredi BQ	990571	990574	990577
		BACredi BL		990578	
Enterococcus faecium (CECT 410 T)	WDCM 00010; ATCC 19434; CCRC 10067; CCTM La 2367; CCUG 542; CIP 103014; DSMZ 20477; GIFU 8355; JCM 5804; LMG 8149; LMG 11423; NCFB 942; NCIMB 11508; NRIC 1145; strain OJ; VTT E-93204	BACredi BC-5	990559	990562	990565
		BACredi BC-10	990560	990563	990566
		BACredi BQ	990561	990564	990567
		BACredi BL		990568	
Escherichia coli (CECT 434)	WDCM 00013; ATCC 25922; CCM 3954; CCRC 14902; CCTM La 2184; CCUG 7736; CCUG 17620; CCUG 21456; CIP 76.24; CNCTC Ec 327/73; DSM 1103; FDA Seattle 1946; GISK 240533; HER 1176; IFO 15034; JCM 5491; LMG 8223; NCIMB 12210; PCM 2057	BACredi BC-5	990539	990542	990545
		BACredi BC-10	990540	990543	990546
		BACredi BQ	990541	990544	990547
		BACredi BL		990548	
Legionella pneumophila **sg.1** Recommended for ISO 11731 Standard tests (cellulose ester membrane filters). (CECT 7109 T)	WDCM 00107; ATCC 33152; Philadelphia 1; CCUG 9568; DSM 7513; JCM 7571; NCTC 11192;	BACredi BC-5	990579	990582	990585
		BACredi BC-10	990580	990583	990586
		BACredi BQ	990581	990584	990587
		BACredi BL		990588	
Legionella pneumophila **sg.1 polycarbonate** Recommended for ISO 11731 Standard tests (polycarbonate/nylon/ polyethersulfone-PES membrane filters). (CECT 7109 T)	WDCM 00107; ATCC 33152; Philadelphia 1; CCUG 9568; DSM 7513; JCM 7571; NCTC 11192;	BACredi BC-5	-	-	990589
		BACredi BC-10	-	-	990590
		BACredi BQ	-	-	990591
		BACredi BL		-	

Pharma Line

Intended use:

- Growth Promotion test
- Nutritional Adequacy test
- Microbial Limits testing
- Microbial Enumeration testing

Pharmacopoeia Strains

ielab offers a wide range of Microbiological Reference Materials of the microbiological strains indicated in the European Pharmacopoeia and commonly used in the quality controls tests carried out in pharmaceutical and/or cosmetic laboratories.

These materials are available in qualitative and quantitative formats, and in different ranges of concentration. The expressed concentration (cfu/0.1 mL) is obtained by dissolving one tablet in 20 mL of sterile water, as indicated in the User Guide accompanying the product.

			Concentration (cfu/0.1 mL)		
Strain (traceability)	Other collections	Format	Low (<100)	High (>100)	Extra-High (10^7-10^8 cfu/tablet)
Aspergillus brasiliensis (niger) (CECT 2574)	WDCM 00053; ATCC 16404; B 39906; B 42936; CABIM 149007; CBS 733.88; CCTM La 2212; DSMZ 1387; DSMZ 1988; FRR 6034; IFO 9455; IHEM 2311; IHEM 3766; IHEM 3794; IMI 149007; MUCL 29039; NCPF 2275; Ringel WLRI 034(120); UMIP 1431.8	BAControl-5	990221	990263	990368
		BAControl-10	990222	990264	990369
		BACuanti	990223	990265	992997
		BACuali	990167		
Bacillus cereus (CECT 193)	WDCM 00001; ATCC 9634; ATCC 11778; BTCC 924; BUCSAV 424; CCM 869; CCRC 10446; CCTM La 1138; CCUG 7415; CCUG 10781; CFBP 488; CFBP 1964; CIP 64.52; CNCTC Bc 7/69; DSMZ 345; DSMZ 4490; FDA PCI 213; HNCMB 100003; IFO 3836; IL 1; IMET 10884; LMD 61.21; LMG 8221; NCFB 720; NCIMB 8012; NCIMB 9231; NCTC 10320; PCI 213; PCM 1948; PCM 2019; Prunier 104-4; Waksman strain O	BAControl-5	990318	990319	-
		BAControl-10	990310	990320	-
		BACuanti	990324	990325	-
		BACuali	990315		
Bacillus pumilus (CECT 152)	ATCC 14884; CCM 2218; CCRC 11597; CCTM La 2428; CCUG 3273; CIP 76.18; CNCTC Bac 2/65; DSM 361; Humphrey strain Mill Hill; IAW 14; IFO 3813; IFO 12102; IMET 10631; NCIMB 8982	BAControl-5	-	-	-
		BAControl-10	-	-	992807
		BACuanti	-	-	-
		BACuali	992972		
Bacillus subtilis (CECT 356)	WDCM 00003; ATCC 6633; BTCC 7241; BUCSAV 425; CCM 1999; CCRC 10447; CCTM La 2114; CCUG 10779; CFBP 1963; CIP 52.62; CNCTC Bs 8/58; DSMZ 347; GISK 010011; Hankey B14; HMGB B100; HNCMB 100007; IAM 1069; IAW 15; IFO 3134; IFO 13720; IL 13; IMET 10880; JCM 2499; LMD 89.157; LMD 47.15; LMG 8197; NCAIM B.01268; NCFB 1733; NCIMB 8566; NCTC 10400; NRRL NRS-231; NRS 231; PCM 219; PCM 1949; PCM 2021; PZH 729; VKM 720; VTT E-85231; WHO 9	BAControl-5	990239	990254	990384
		BAControl-10	990240	990255	990385
		BACuanti	990241	990256	-
		BACuali	990207		

Strain (traceability)	Other collections	Format	Concentration (cfu/0.1 mL) Low (<100)	High (>100)	Extra-High (10^7-10^8cfu/tablet)
Burkholderia cenocepacia (CECT 9952)	ATCC BAA-245; CCM 4899; CCUG 48434; NCTC 13227	BAControl-5	992721	-	992751
		BAControl-10	992722	-	992752
		BACuanti	-	-	-
		BACuali	-		
Burkholderia cepacia (CECT 4137)	ATCC 25416; NCTC 10743; Ballard 717; Burkholder 717; CCEB 669; CCRC 10735; CCRC 13208; CCUG 12691; CCUG 13226; CFBP 2227; CIP 80.24; CNCTC Ps 156/77; DSM 7288; FIRDI 735; ICMP 5796; ICPB PC25; IFO 14074; JCM 5964; Kosako 85005; LMG 1222; NCPPB 2993; Palleroni 717; PDDCC 5796; RH 2796; Starr KPB PC25; VTT E-94512	BAControl-5	992719	-	992749
		BAControl-10	992720	-	992750
		BACuanti	-	-	-
		BACuali	-		
Candida albicans (CECT 1394)	WDCM 00054; ATCC 10231; B 42904; CBS 6431; CCTM La 2785; CCY 29-3-106; DSMZ 1386; Emmons 3149; HAMBI 484; IFO 1594; IHEM 4263; JCM 2085; MUCL 30114; NCPF 3179; NCYC 1363; NIH 3147; UMIP 48.72; VTT C-85161	BAControl-5	990242	990257	990372
		BAControl-10	990243	990258	990373
		BACuanti	990244	990259	-
		BACuali	990166		
Clostridium sporogenes (CECT 797)	ATCC 11437; CCRC 13856; CCTM La 3546; CCUG 31316; CIP 100651; IFO 14293; McClung 2006; NCAIM B.01416; NCIMB 12343	BAControl-5	990245	990260	-
		BAControl-10	990246	990261	-
		BACuanti	990247	990262	-
		BACuali	990214		
Clostridium sporogenes (CECT 485)	WDCM 00008; ATCC 19404; CCM 4409; CCRC 11258; CCTM La 2951; CCUG 7489; CCUG 18371; CIP 79.3; CNCTC Cl 66/79; DSMZ 1664; LMD 85.28; LMG 10143; NCFB 1710; NCIMB 532; Robertson SR5	BAControl-5	990287	990289	-
		BAControl-10	990288	990290	-
		BACuanti	990294	990295	-
		BACuali	990284		
Cutibacterium acnes (CECT 5684)	ATCC 6919; CCUG 1794; DSM 1897; FIRDI 723; JCM 6425; LMG 16711; LMG 3591; NCTC 737; NRRL B-4224; VKM Ac-1450; Ponsonby; VPI 0389	BAControl-5	-	993002	-
		BAControl-10	-	-	-
		BACuanti	-	992975	-
		BACuali	-		

Strain (traceability)	Other collections	Format	Concentration (cfu/0.1 mL) Low (<100)	High (>100)	Extra-High (10^7-10^8cfu/tablet)
Enterococcus faecalis (CECT 795)	ATCC 29212; CCM 4224; CCRC 10789; CCUG 7739; CCUG 9997; CIP 103214; CNCTC Str 17/88; DSM 2570; JCM 2875; Kaiser-Permanente strain Portland; LMG 8146; LMG 8222; NCIMB 13280; WDCM 00087	BAControl-5	992806	-	-
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali	-		
Enterococcus hirae (CECT 4081)	ATCC 10541; CCRC 11547; CCUG 32258; CECT 214; CIP 58.55; CNCTC Str 6/58; DSM 3320; FDA M19; IAW 143; LMG 10274; NCIMB 8192; PCI 1341; WDCM 00011	BAControl-5	-	990662	-
		BAControl-10	-	990492	-
		BACuanti	-	-	-
		BACuali	-		
Escherichia coli (CECT 516)	WDCM 00012; ATCC 8739; CCRC 11634; CCTM La 2194; CCUG 10979; CIP 53.126; DSMZ 1576; Crooks; IFO 3972; IMET 11121; LMG 8063; NCFB 904; PCM 2561; VTT E-76039	BAControl-5	990224	990266	990370
		BAControl-10	990225	990267	990371
		BACuanti	990226	990268	-
		BACuali	990168		
Micrococcus luteus (CECT 5863 T)	WDCM 00111; ATCC 4698; CCM 169; CECT 51; CECT 5053; CIP A270; DSM 20030; HAMBI 26; HAMBI 1399; IEGM 391; JCM 1464; LMG 4050; NBRC 3333; NCCB 78001; NCTC 2665; NCIB 9278; NRRL B-287; VKM B-1314	BAControl-5	990358	990360	-
		BAControl-10	990359	990361	-
		BACuanti	990365	990366	-
		BACuali	990355		
Pseudomonas aeruginosa (CECT 111)	WDCM 00026; ATCC 9027; BUCSAV 278; CCM 1961; CCRC 11633; CCTM La 3362; CCUG 22801; CIP 82.118; CNCTC Ps 37/65; DSMZ 1128; DSMZ 1385; Hugh 813; IAM 10374; IFO 13275; IMET 10905; LMG 8029; NRRL B-800; PCM 2562; RH 813	BAControl-5	990236	990251	990376
		BAControl-10	990237	990252	990377
		BACuanti	990238	990253	-
		BACuali	990182		
Salmonella enterica **subsp.** ***enterica*** **serovar Abony** (CECT 545)	WDCM 00029; NCTC 6017; CCTM La 2697; CCUG 21354; CIP 80.39; CNCTC SK 103; DSM 4224; PCM 2564; 74	BAControl-5	990230	990272	-
		BAControl-10	990231	990273	-
		BACuanti	990232	990274	-
		BACuali	990200		

Strain (traceability)	Other collections	Format	Concentration (cfu/0.1 mL) Low (<100)	High (>100)	Extra-High (10^7-10^8cfu/tablet)
***Salmonella enterica* subsp. *enterica* serovar Gallinarum** (CECT 4182)	NCTC 10532; CNCTC SK 74; IW 560; Kauffmann 416; KOS 74; IW 560; NCTC 10532; StBL 416	BAControl-5	992960	-	-
		BAControl-10	992801	-	-
		BACuanti	-	-	-
		BACuali	-		
***Salmonella enterica* subsp. *enterica* serovar Typhimurium** (CECT 4594)	WDCM 00031; ATCC 14028; CCRC 10747; CDC 6516-60; CIP 104115; NCIMB 13284	BAControl-5	990227	990269	-
		BAControl-10	990228	990270	-
		BACuanti	990229	990271	-
		BACuali	990193		
Staphylococcus aureus (CECT 239)	WDCM 00032; ATCC 6538; CCRC 12154; CCTM La 2103; CCUG 10778; CIP 4.83; CNCTC Mau 29/58; DSMZ 799; FDA 209; FIRDI 941; HMGB B865; IAW 34; IFO 13276; IMET 10761; LMD 46.64; LMG 8064; NCTC 10788; VTT E-70045	BAControl-5	990233	990248	990374
		BAControl-10	990234	990249	990375
		BACuanti	990235	990250	-
		BACuali	990175		
Staphylococcus epidermidis (CECT 232 T)	WDCM 00132; ATCC14990; AMIF strain Fussel; BTCC 2124; CCM 2124; CCRC 10785; CCTM La 2817; CCUG 18000; CIP 81.55; DSM 20044; GISK 202001; IAM 12013; JCM 2414; LMG 10474; NCAIM B.01066; NCIMB 12721; NCTC 11047; PCM 2118; Hugh RH 2466	BAControl-5	990330	990336	-
		BAControl-10	990331	990337	-
		BACuanti	990333	990339	-
		BACuali	990341		
Zygosaccharomyces rouxii (CECT 1230)	ATCC 8383; CBS 741; IFO 0686; IMAB L-11-4; NCYC 581	BAControl-5	-	993009	-
		BAControl-10	-	-	-
		BACuanti	-	-	-
		BACuali	-		

Double Quantification Strains

ielab has a line of quantified reference materials (<100 cfu) using 0.1 mL spread plate tests, both in general culture medium and in the culture medium specified by the European Pharmacopiea in section 2.6.13.

The concentration value has been obtained after dissolving a tablet in 20 mL of sterile water, as indicated in the User Guide that accompanies the product.

			Concentration (cfu/0.1 mL)
Strain (traceability)	Other collections	Format	Low (<100)
Aspergillus brasiliensis (niger) (CECT 2574)	WDCM 00053; ATCC 16404; B 39906; B 42936; CABIM 149007; CBS 733.88; CCTM La 2212; DSMZ 1387; DSMZ 1988; FRR 6034; IFO 9455; IHEM 2311; IHEM 3766; IHEM 3794; IMI 149007; MUCL 29039; NCPF 2275; Ringel WLRI 034(120); UMIP 1431.8	BAControl-5	990690
		BAControl-10	990691
Bacillus subtilis (CECT 356)	WDCM 00003; ATCC 6633; BTCC 7241; BUCSAV 425; CCM 1999; CCRC 10447; CCTM La 2114; CCUG 10779; CFBP 1963; CIP 52.62; CNCTC Bs 8/58; DSMZ 347; GISK 010011; Hankey B14; HMGB B100; HNCMB 100007; IAM 1069; IAW 15; IFO 3134; IFO 13720; IL 13; IMET 10880; JCM 2499; LMD 89.157; LMD 47.15; LMG 8197; NCAIM B.01268; NCFB 1733; NCIMB 8566; NCTC 10400; NRRL NRS-231; NRS 231; PCM 219; PCM 1949; PCM 2021; PZH 729; VKM 720; VTT E-85231; WHO 9	BAControl-5	992717
		BAControl-10	992718
Candida albicans (CECT 1394)	WDCM 00054; ATCC 10231; B 42904; CBS 6431; CCTM La 2785; CCY 29-3-106; DSMZ 1386; Emmons 3149; HAMBI 484; IFO 1594; IHEM 4263; JCM 2085; MUCL 30114; NCPF 3179; NCYC 1363; NIH 3147; UMIP 48.72; VTT C-85161	BAControl-5	990702
		BAControl-10	990703
Clostridium sporogenes (CECT 797)	ATCC 11437; CCRC 13856; CCTM La 3546; CCUG 31316; CIP 100651; IFO 14293; McClung 2006; NCAIM B.01416; NCIMB 12343	BAControl-5	990704
		BAControl-10	990705
Clostridium sporogenes (CECT 485)	WDCM 00008; ATCC 19404; CCM 4409; CCRC 11258; CCTM La 2951; CCUG 7489; CCUG 18371; CIP 79.3; CNCTC Cl 66/79; DSMZ 1664; LMD 85.28; LMG 10143; NCFB 1710; NCIMB 532; Robertson SR5	BAControl-5	990706
		BAControl-10	990707
Escherichia coli (CECT 516)	WDCM 00012; ATCC 8739; CCRC 11634; CCTM La 2194; CCUG 10979; CIP 53.126; DSMZ 1576; Crooks; IFO 3972; IMET 11121; LMG 8063; NCFB 904; PCM 2561; VTT E-76039	BAControl-5	990692
		BAControl-10	990693

Strain (traceability)	Other collections	Format	Concentration (cfu/0.1 mL) Low (<100)
Pseudomonas aeruginosa (CECT 111)	WDCM 00026; ATCC 9027; BUCSAV 278; CCM 1961; CCRC 11633; CCTM La 3362; CCUG 22801; CIP 82.118; CNCTC Ps 37/65; DSMZ 1128; DSMZ 1385; Hugh 813; IAM 10374; IFO 13275; IMET 10905; LMG 8029; NRRL B-800; PCM 2562; RH 813	BAControl-5	990700
		BAControl-10	990701
***Salmonella enterica* subsp. *enterica* serovar Abony** (CECT 545)	WDCM 00029; NCTC 6017; CCTM La 2697; CCUG 21354; CIP 80.39; CNCTC SK 103; DSM 4224; PCM 2564; 74	BAControl-5	990696
		BAControl-10	990697
***Salmonella enterica* subsp. *enterica* serovar Typhimurium** (CECT 4594)	WDCM 00031; ATCC 14028; CCRC 10747; CDC 6516-60; CIP 104115; NCIMB 13284	BAControl-5	990694
		BAControl-10	990695
Staphylococcus aureus (CECT 239)	WDCM 00032; ATCC 6538; CCRC 12154; CCTM La 2103; CCUG 10778; CIP 4.83; CNCTC Mau 29/58; DSMZ 799; FDA 209; FIRDI 941; HMGB B865; IAW 34; IFO 13276; IMET 10761; LMD 46.64; LMG 8064; NCTC 10788; VTT E-70045	BAControl-5	990698
		BAControl-10	990699

Strains for Hydration in 10 mL

Some of the materials for the strains indicated in the European Pharmacopoeia or that have a double quantification value are also available for hydration in 10 mL, whose references are detailed in the following table.

			Concentration (cfu/0.1 mL)		
Strain (traceability)	Other collections	Format	Low (<100)	High (>100)	Extra-High (10^7-10^8 cfu/tablet)
Aspergillus brasiliensis (niger) (CECT 2574)	WDCM 00053; ATCC 16404; B 39906; B 42936; CABIM 149007; CBS 733.88; CCTM La 2212; DSMZ 1387; DSMZ 1988; FRR 6034; IFO 9455; IHEM 2311; IHEM 3766; IHEM 3794; IMI 149007; MUCL 29039; NCPF 2275; Ringel WLRI 034(120); UMIP 1431.8	BAControl-5	992832	992874	992914
			992928[3]	-	-
		BAControl-10	992833	992875	992915
			992929[3]	-	-
		BACuanti	992834	992876	992998
Bacillus cereus (CECT 193)	WDCM 00001; ATCC 9634; ATCC 11778; BTCC 924; BUCSAV 424; CCM 869; CCRC 10446; CCTM La 1138; CCUG 7415; CCUG 10781; CFBP 488; CFBP 1964; CIP 64.52; CNCTC Bc 7/69; DSMZ 345; DSMZ 4490; FDA PCI 213; HNCMB 100003; IFO 3836; IL 1; IMET 10884; LMD 61.21; LMG 8221; NCFB 720; NCIMB 8012; NCIMB 9231; NCTC 10320; PCI 213; PCM 1948; PCM 2019; Prunier 104-4; Waksman strain O	BAControl-5	992896	992897	-
		BAControl-10	992892	992898	-
		BACuanti	992899	992900	-
Bacillus subtilis (CECT 356)	WDCM 00003; ATCC 6633; BTCC 7241; BUCSAV 425; CCM 1999; CCRC 10447; CCTM La 2114; CCUG 10779; CFBP 1963; CIP 52.62; CNCTC Bs 8/58; DSMZ 347; GISK 010011; Hankey B14; HMGB B100; HNCMB 100007; IAM 1069; IAW 15; IFO 3134; IFO 13720; IL 13; IMET 10880; JCM 2499; LMD 89.157; LMD 47.15; LMG 8197; NCAIM B.01268; NCFB 1733; NCIMB 8566; NCTC 10400; NRRL NRS-231; NRS 231; PCM 219; PCM 1949; PCM 2021; PZH 729; VKM 720; VTT E-85231; WHO 9	BAControl-5	992850	992865	992924
			992946[3]	-	-
		BAControl-10	992851	992866	992925
			992947[3]	-	-
		BACuanti	992852	992867	-

[3]Reference with double quantification value

Strain (traceability)	Other collections	Format	Concentration (cfu/0.1 mL) Low (<100)	High (>100)	Extra-High (10^7-10^8 cfu/tablet)
Burkholderia cenocepacia (CECT 9952)	ATCC BAA-245; CCM 4899; CCUG 48434; NCTC 13227	BAControl-5	992950	-	992956
		BAControl-10	992951	-	992957
		BACuanti	-	-	-
Burkholderia cepacia (CECT 4137)	ATCC 25416; NCTC 10743; Ballard 717; Burkholder 717; CCEB 669; CCRC 10735; CCRC 13208; CCUG 12691; CCUG 13226; CFBP 2227; CIP 80.24; CNCTC Ps 156/77; DSM 7288; FIRDI 735; ICMP 5796; ICPB PC25; IFO 14074; JCM 5964; Kosako 85005; LMG 1222; NCPPB 2993; Palleroni 717; PDDCC 5796; RH 2796; Starr KPB PC25; VTT E-94512	BAControl-5	992948		992954
		BAControl-10	992949	-	992955
		BACuanti	-	-	-
Candida albicans (CECT 1394)	WDCM 00054; ATCC 10231; B 42904; CBS 6431; CCTM La 2785; CCY 29-3-106; DSMZ 1386; Emmons 3149; HAMBI 484; IFO 1594; IHEM 4263; JCM 2085; MUCL 30114; NCPF 3179; NCYC 1363; NIH 3147; UMIP 48.72; VTT C-85161	BAControl-5	992853	992868	992918
			992940[3]	-	-
		BAControl-10	992854	992869	992919
			992941[3]	-	-
		BACuanti	992855	992870	-
Clostridium sporogenes (CECT 797)	ATCC 11437; CCRC 13856; CCTM La 3546; CCUG 31316; CIP 100651; IFO 14293; McClung 2006; NCAIM B.01416; NCIMB 12343	BAControl-5	992856	992871	-
			992942[3]	-	-
		BAControl-10	992857	992872	-
			992943[3]	-	-
		BACuanti	992858	992873	-
Clostridium sporogenes (CECT 485)	WDCM 00008; ATCC 19404; CCM 4409; CCRC 11258; CCTM La 2951; CCUG 7489; CCUG 18371; CIP 79.3; CNCTC Cl 66/79; DSMZ 1664; LMD 85.28; LMG 10143; NCFB 1710; NCIMB 532; Robertson SR5	BAControl-5	992886	992888	-
			992944[3]	-	-
		BAControl-10	992887	992889	-
			992945[3]	-	-
		BACuanti	992890	992891	-

[3]Reference with double quantification value

Strain (traceability)	Other collections	Format	Concentration (cfu/0.1 mL) Low (<100)	High (>100)	Extra-High (10^7-10^8 cfu/tablet)
Enterococcus hirae (CECT 4081)	ATCC 10541; CCRC 11547; CCUG 32258; CECT 214; CIP 58.55; CNCTC Str 6/58; DSM 3320; FDA M19; IAW 143; LMG 10274; NCIMB 8192; PCI 1341; WDCM 00011	BAControl-5	-	992927	-
		BAControl-10	-	992926	-
		BACuanti	-	-	-
Escherichia coli (CECT 516)	WDCM 00012; ATCC 8739; CCRC 11634; CCTM La 2194; CCUG 10979; CIP 53.126; DSMZ 1576; Crooks; IFO 3972; IMET 11121; LMG 8063; NCFB 904; PCM 2561; VTT E-76039	BAControl-5	992835	992877	992916
			992930[3]	-	-
		BAControl-10	992836	992878	992917
			992931[3]	-	-
		BACuanti	992837	992879	-
Micrococcus luteus (CECT 5863 T)	WDCM 00111; ATCC 4698; CCM 169; CECT 51; CECT 5053; CIP A270; DSM 20030; HAMBI 26; HAMBI 1399; IEGM 391; JCM 1464; LMG 4050; NBRC 3333; NCCB 78001; NCTC 2665; NCIB 9278; NRRL B-287; VKM B-1314	BAControl-5	992908	992910	-
		BAControl-10	992909	992911	-
		BACuanti	992912	992913	-
Pseudomonas aeruginosa (CECT 111)	WDCM 00026; ATCC 9027; BUCSAV 278; CCM 1961; CCRC 11633; CCTM La 3362; CCUG 22801; CIP 82.118; CNCTC Ps 37/65; DSMZ 1128; DSMZ 1385; Hugh 813; IAM 10374; IFO 13275; IMET 10905; LMG 8029; NRRL B-800; PCM 2562; RH 813	BAControl-5	992847	992862	992922
			992938[3]	-	-
		BAControl-10	992848	992863	992923
			992939[3]	-	-
		BACuanti	992849	992864	-
Salmonella enterica **subsp. *enterica* serovar Abony** (CECT 545)	WDCM 00029; NCTC 6017; CCTM La 2697; CCUG 21354; CIP 80.39; CNCTC SK 103; DSM 4224; PCM 2564; 74	BAControl-5	992841	992883	-
			992934[3]	-	-
		BAControl-10	992842	992884	-
			992935[3]	-	-
		BACuanti	992843	992885	-

[3]Reference with double quantification value

Strain (traceability)	Other collections	Format	Concentration (cfu/0.1 mL) Low (<100)	High (>100)	Extra-High (10^7-10^8 cfu/tablet)
***Salmonella enterica* subsp. *enterica* serovar Typhimurium** (CECT 4594)	WDCM 00031; ATCC 14028; CCRC 10747; CDC 6516-60; CIP 104115; NCIMB 13284	BAControl-5	992838	992880	-
			992932[3]	-	-
		BAControl-10	992839	992881	-
			992933[3]	-	-
		BACuanti	992840	992882	-
Staphylococcus aureus (CECT 239)	WDCM 00032; ATCC 6538; CCRC 12154; CCTM La 2103; CCUG 10778; CIP 4.83; CNCTC Mau 29/58; DSMZ 799; FDA 209; FIRDI 941; HMGB B865; IAW 34; IFO 13276; IMET 10761; LMD 46.64; LMG 8064; NCTC 10788; VTT E-70045	BAControl-5	992844	992859	992920
			992936[3]	-	-
		BAControl-10	992845	992860	992921
			992937[3]	-	-
		BACuanti	992846	992861	-
Staphylococcus epidermidis (CECT 232 T)	WDCM 00132; ATCC14990; AMIF strain Fussel; BTCC 2124; CCM 2124; CCRC 10785; CCTM La 2817; CCUG 18000; CIP 81.55; DSM 20044; GISK 202001; IAM 12013; JCM 2414; LMG 10474; NCAIM B.01066; NCIMB 12721; NCTC 11047; PCM 2118; Hugh RH 2466	BAControl-5	992901	992904	-
		BAControl-10	992902	992905	-
		BACuanti	992903	992906	-

[3]Reference with double quantification value

Pharma BAControl Selection

Within our range of ready-to-use products for microbiological quality control, we have prepared specific combinations of strains intended for numerous applications. Pharma BAControl Selection is specially designed for Bioburden, Growth Promotion Test, Challenge Test, Nutritional Adequacy Test, Water Analysis...

After only 10 minutes of dissolving the tablet in a volume of 20 mL of sterile water, with Pharma BAControl Selection an exact concentration of the desired microorganism is obtained for its inoculation. This product is also supplied accompanied by an User Guide and its Corresponding Analysis Report.

		Growth Promotion Pack	Challenge Test Pack
Concentration		<100 cfu/0.1 mL	10^7-10^8 ufc/tablet
Intended use		Growth Promotion Nutritional adequacy Microbial limits Microbial enumeration	Challenge Test Antimicrobial effectiveness Preservative efficacy
Strain (traceability)		*Aspergillus brasiliensis* traceable to CECT 2574 *Bacillus subtilis* traceable to CECT 356 *Candida albicans* traceable to CECT 1394 *Clostridium sporogenes* traceable to CECT 797 *Pseudomonas aeruginosa* traceable to CECT 111	*Aspergillus brasiliensis* traceable to CECT 2574 *Candida albicans* traceable to CECT 1394 *Escherichia coli* traceable to CECT 516 *Pseudomonas aeruginosa* traceable to CECT 111 *Staphylococcus aureus* traceable to CECT 239
Reference	**5 tablets**	990312	990314
	10 tablets	990313	990340
		992894[4]	992907[4]

[4]Reference for Hydration in 10 mL

Environmental and In-house Isolates

Environmental Isolates

We offer a wide range of environmental isolates, which are strains isolated and identified from environmental samples. These strains are presented in a qualitative, safe, easy-to-use and storage lyophilized format, for their use in the validation of different test methods.

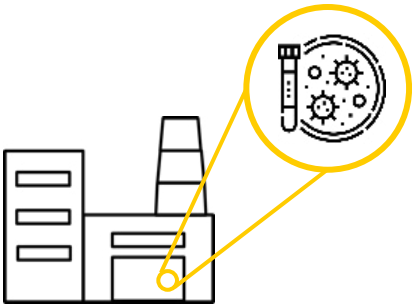
In addition to the available strains, ielab offers the possibility of preparing reference material from other microorganisms. This material can be made from both collection or autochthonous strains. The later correspond to strains that are typical of a workplace, which need to be isolated and available as reference material, both quantitative and qualitative, for their use in usual quality controls of work processes.

	Environmental Isolates	
Description	Environmental Isolates Reference Material	
Origin	Strains isolated and identified from environmental samples	
Format	Qualitative	
Intended use	Validation of different test methods	
Shelf life	12 months	
Minimum order	5 vials	
Presentation	Vial containing 1 lyophilized tablet	
References	**Microorganism**	**Reference**
	Escherichia coli	990275
	Enterococcus faecium	990276
	Salmonella spp.	990277
	Legionella pneumophila	990278
	Legionella spp.	990279
	Clostridium perfringens	990280
	Staphylococcus aureus	990281
	Other species	990282

In-house Isolates

ielab offers the possibility of having a manufacturing service for reference material from isolated strains obtained in the own facilities for a variety of sectors such as the pharmaceutical and parapharmaceutical industry, food industry, cosmetic, etc.

We also have an identification service by sequencing of the in house isolated strains (see the section of Complementary Material).



Helminths

Helminths

In addition to the reference material for bacteria, molds and yeasts, we also have reference material for helminth, which is presented in vials containing approximately 150 eggs per vial. This material has a shelf life of 12 months from the date of preparation.

Helminths	
Specie	**Reference**
Fasciola hepatica	990149
Fasciola gigantica	990150
Ascaris lumbricoides	990151
Taenia solium	990152
Trichuris sp.	990153
Schistosoma sp.	990154
Diphyllobothrium sp.	990155

Complementary Material and Services

Complementary Material			
Material	**Description**	**Specifications**	**Reference**
BACwater	Vial containing sterile water	10-vials box	990156
BACglass	Sterile vial	10-vials box	990157
BACblank	Tablet without microorganisms (blank) suitable for cellulose ester membrane filters	5-tablets device	992795
BACblank polycarbonate	Tablet without microorganisms (blank) suitable for polycarbonate/nylon/polyethersulfone-PES membrane filters	5-tablets device	992974
Express delivery fee	Additional charge to the shipping costs, for urgent shipments with service in 3-4 business days	Subject to stock availability	992796
Strain acquisition fee	Fee for the acquisition of a standard strain from the CECT	Subject to stock availability	992976
Standard BACuali production fee	Fee for the production of a reference material in BACuali qualitative format from a standard strain	Subject to technical evaluation	992977
Standard BAControl production fee	Fee for the production of a reference material in BAControl quantitative format from a standard strain	Subject to technical evaluation	992978
Standard BACuanti production fee	Fee for the production of a reference material in BACuanti certified quantitative format from a standard strain	Subject to technical evaluation	992979
Sequencing	Identification service by strain sequencing, such as in house isolated strains	Subject to technical evaluation	992625

- Orders will be registered through the online platform: https:/ /tienda.ielab.es, prior registration as a client.
- Once the merchandise has left our facilities, no changes in references will be accepted.
- Claims will be accepted until three months from the receipt of the order.
- You can download the certificate and scope of accreditation, quick use guides and other interest documents at the following link: https://www.ielab.es/en/downloads/

Molecular Diagnostic Kits

Molecular Diagnostic Kits

ielab presents within the framework of its products line for molecular diagnosis, a set of kits for sample preparation and detection of microorganisms by qPCR techniques, specially designed to simplify and improve the microbiological diagnostics in water samples.

All kits have a 12-month shelf life and are supplied with the corresponding certificate of analysis and the user guide. The detection kit manuals are available on our website (www.ielab.es).

Why choosing ielab Kits?

Complete
Include all the necessary reagents to perform the analyses

Ready-to-use
Liquid reagents ready-to-use

Easy to store
In a conventional freezer (-20 ±5 ºC) or at room temperature, depending on the kit

Secure
The kit minimizes the number of manipulations, reducing the time and possible errors

Quality
Exceptional sensitivity, specificity and reproducibility

Maximum reliability
Use of internal and external positive controls

Automation
Ability to systematize the process

Optimization
Great versatility and flexibility in sample analysis

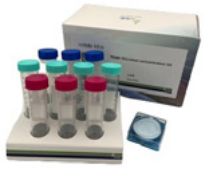
Flexible
Adaptable to different matrices and suitable for any thermocycler

Easy
Easy handling and fast interpretation of results by any analyst

Fast
Results in less than 3 hours

Durable
12-months shelf life guaranteed

Molecular Diagnostic Kits

Kits	Description	Reference	Photo
Water Microbial Concentration Kit	Kit for the concentration of the microorganisms present in water samples prepared by filtration and concentration cartridges, for later testing for the presence of *Legionella* or other bacteria by PCR techniques	990075	
Clean Water DNA Extraction Kit	System for the extraction and purification of DNA from water samples in which it is assumed that the microbiota and organic material contents are low (for example, in drinking water). This kit allows the production of DNA with a quality and quantity enough for the analysis of the presence of *Legionella* or other bacteria by PCR techniques	990074	
Dirty Water DNA Extraction Kit	System for the extraction and purification of DNA from “dirty” water samples (for example, water from cooling towers). This kit allows the production of DNA with a quality and quantity sufficient for the analysis of the presence of *Legionella* or other bacteria by PCR techniques. It is particularly useful for the elimination of possible inhibitors of the PCR reactions	990076	
***Legionella* spp. Quantitative Detection Kit**	Kits for the detection and quantification of *Legionella* spp. in DNA extracts from water samples coming from different sources. Each kit contains all the necessary material to carry out 70 tests and is supplied in liquid format	990043	
***Legionella pneumophila* Quantitative Detection Kit**	Kits for the detection and quantification of *Legionella pneumophila* in DNA extracts from water samples coming from different sources. Each kit contains all the necessary material to carry out 70 tests and is supplied in liquid format	990039	

Complementary Material

Complementary Material	Description	Specifications	Reference
Filtration membranes (100 units)	0.45 µm polycarbonate membrane filters for the concentration of microorganisms present in water samples using filtration techniques	-	990108
qPCR quantification program	This software provides a quick way to calculate the number of Genomic Units (G.U.) in the samples analysed	-	992405
qPCR validation program	The spreadsheet can be used for the characterization and secondary validation of the methods based on the use of ielab qPCR kits for the detection and quantification of *Legionella* spp (Ref. 990043) and *Legionella pneumophila* (Ref. 990039) and in accordance to ISO/TS 12869	-	992404
Legionella pneumophila **BAControl-PCR**	Quantitative reference material specially designed for PCR technique, supplied in tablet format. Each tablet contains a specific number of inactivated cells, and a report is provided indicating the number of G.U. per tablet. It allows the control of the whole analytical process, from the initial sample until the final analysis. This material has a 12-months shelf life since the launch date and it is supplied in a 5-tablet dispenser	Low concentration (log >4 y <6)	990069
		High concentration (log >6 y <8)	990083
BAControl-DNA	Quantitative material presented in lyophilized format in a vial, whose amount of DNA is expressed in µg/vial. It has been designed for validation and quality control of the PCR amplification phase. The material has a 12-months shelf life since the launch date and it is supplied in individual vials accompanied by a sterile water vial (PCR grade). In addition to the available strains, it is possible to manufacture this material for other strains under request	*Legionella pneumophila* (CECT 7109 T)	990060
		Escherichia coli (CECT 434)	990123
Resin (kit for preparing "dirty" water samples)	Container with 20-30 mL of Resin used for extraction and DNA purification in "dirty" water samples.	-	992982

Physical-chemical Certified Reference Materials

Physical-chemical Certified Reference Materials

ielab presents a wide range of physical-chemical certified reference materials, designed to facilitate all quality control tasks performed in the laboratories. These materials come from surplus samples from Proficiency Testing Schemes organized by ielab and accredited by ENAC, and are supplied with the corresponding Certificate of Analysis.

Why choosing ielab Physical-chemical Certified Reference Materials?

Robust

They come from Proficiency Testing Schemes accredited by ENAC

Homogeneous

Statistical studies of variability according to ISO GUIDE 35 and IUPAC protocol, and accredited analysis EN ISO/IEC 17025

Origin

Real matrix materials mostly

Stable

Stability according to ISO 13528:2015 Standard and accredited analysis EN ISO/IEC 17025

Quality Guarantee

Produced following the criteria of the ISO 17034 Standard

Flexible

Materials for various matrices and the most varied parameters

Economic

Good value for money

Matrix	Wastewater		Drinking Water	
Material	Material coming from WWTP of urban or industrial origin		Material coming in origin from drinking potable water supplies sources	
Reference	990592	990604	990593	990595
Intended use	Wastewater for the analyses of Chromium, Aluminium, Iron, Lead, Cadmium and Zinc	Wastewater for the analyses of Orthophosphates, total Phosphorus, Nitrates, total Nitrogen and Kjeldahl Nitrogen	Drinking water for the analyses of Iron, Arsenic, Selenium, Lead, Copper, Nickel, Chromium, Aluminium, Antimony, Manganese, Cadmium, Chlorures, Potassium, Sulphates, Calcium, Magnesium, Sodium, Conductivity, Nitrates, Zinc and pH	Drinking water for the analyses of Barium, Beryllium, Vanadium, Calcium, Hardness, Dry residue, Magnesium, Silica and total Phosphorus
Quantity	500 mL	100 mL	500 mL (100 mL for pH)	500 mL
Shelf life	6 months since the shipping date		6 months since the shipping date	

Matrix	Sludges	Sea Water	Soils
Material	Sludge material coming from WWTP of urban or industrial origin	Material directly taken in origin from the Mediterranean Sea	Soil material of rural origin
Reference	990596	990599	990600
Intended use	Sludge for the analyses of Cadmium, Copper, Chromium, Mercury, Nickel, Lead, Zinc, Conductivity, Aluminium, Total Phosphorus, Arsenic, Manganese, Organic Matter, Iron, Kjeldahl Nitrogen and pH	Sea water for the analyses of Nitrates, pH, Orthophosphates, Salinity, Kjeldahl Nitrogen, Lead and Antimony	Soil for the analyses of Total Phosphorus, Iren, Magnesium, Sodium, Cadmium, Chromium, Nickel, Zinc, pH, Arsenic, Copper, Mercury, Lead, Calcium, Manganese, Potassium and Conductivity
Quantity	40-50 gr	500 mL (100 mL for pH)	40-50 gr
Shelf life	12 months since the shipping date	6 months since the shipping date	12 months since the shipping date

Matrix	Impinger Solutions	Sampling Supports
Material	Reference Material prepared in the laboratory	
Reference	990597	990598
Intended use	Impinger solution for the analyses of Cadmium, Arsenic, Antimony, Copper, HCl, Chromium, Manganese, Lead, Vanadium, SO2, Cobalt, Tin, Nickel, Zinc, HF and Thallium	Sampling supports for the analyses of Arsenic, Cobalt, Manganese, Nickel, Vanadium, Antimony, Cadmium, Chromium, Tin, Copper, Lead, Selenium, Thallium and Zinc
Quantity	500 mL (blank + impinger solution)	3 blank + 3 spiked filters
Shelf life	6 months since the shipping date	

Matrix	LD23 Accredited Sludge
Material	Certified Reference Material and accredited by ENAC of sludges coming from WWTP of urban or industrial origin
Reference	990605
Intended use	Sludge for the analyses of Cadmium, Copper, Chromium, Mercury, Nickel, Lead, Zinc and total Phosphorus
Quantity	40-50 gr
Shelf life	12 months since the shipping date

CERTIFICATE OF ANALYSIS

CERTIFIED REFERENCE MATERIAL

Matrix: **WASTEWATER**
Product reference: **SAPXXXX**
Batch: **RES 100.70**

Analyte	Property value (mg/L)	Uncertainty (mg/L)	Confidence interval (mg/L)	Number of data (n)
TOTAL NITROGEN	89.9	0.56	1.12	82

The uncertainty of the material has been calculated as follows:

$$\frac{s_l}{\sqrt{n}}$$

The 95% confidence interval of the property value is:

$$m \pm t_{0.025}(v)\frac{s_l}{\sqrt{n}}$$

n: number of laboratories included in the statistical treatment
v: n-1 free degrees
$t_{0.025}(v)$: value t for a level of 0.025 and v: free degrees

Delivery date: February, 22nd 2023
Expiry date: August, 22nd 2023

Approved and authorized by Estíbaliz Sastre, Technical Manager of Physical-chemical Area.

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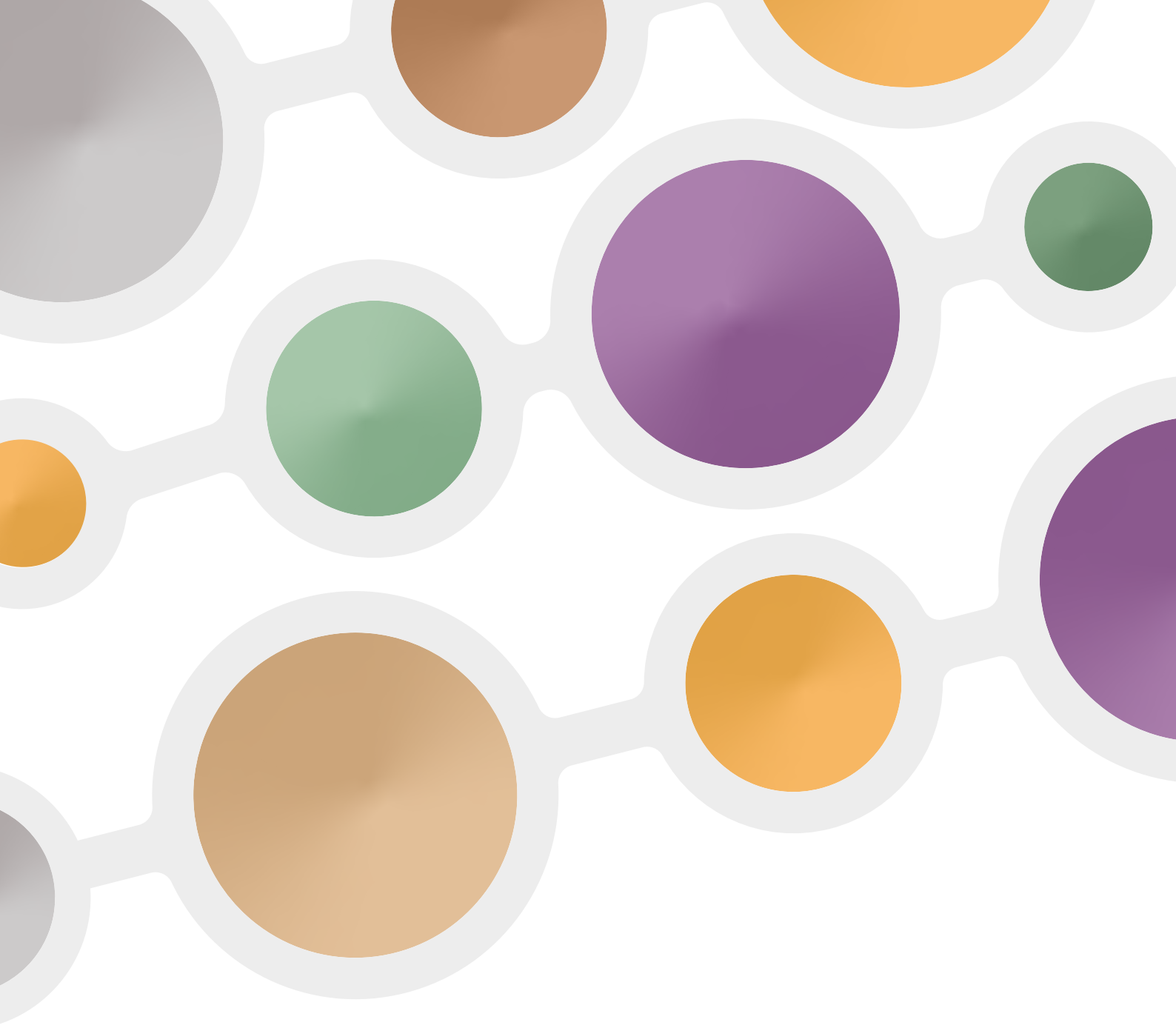

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