

LSB /Broth (Listeria Special Broth)

355-5703
355-5793
356-4703
356-4753

APPLICATIONS

Selective enrichment broth used for the detection of *Listeria monocytogenes* and other *Listeria* species in food products and environmental samples in the iQ-Check™ *Listeria monocytogenes* II (code 357-8124) and iQ-Check™ *Listeria* spp (code 357-8113) methods.

PRINCIPLES

The peptone and yeast extract mixture provides the nutritional elements necessary for *Listeria* growth.

The presence of an adequate buffer ensures control of the pH and good *Listeria* recovery.

The selective mixture renders the broth inhibitory for the majority of similar micro-organisms.

PRESENTATION

• Ready to use

225 ml x 6 flasks

5 l x 2 bags

code 355-5703

code 355-5793

• Dehydrated

500g

5kg

code 356-4703

code 356-4753

STORAGE/VALIDITY/BATCH

- Ready-to-use: + 2°C - 8°C in the dark up until the expiration date
- The expiration date and the batch number are indicated on the packaging.

FORMULA

Basic medium

Peptone mixture	15 g
Yeast extract	5 g
Buffer	22.2 g
Ferric citrate (Fe III)	0.5 g
Selective mixture	8 g
Distilled water	1000 ml
pH (25°C) final = 7.2 ± 0.2	

REQUIRED MATERIEL (NOT SUPPLIED)

(non-exhaustive list)

- Scale
- Sterile boats
- Grinder
- Sterile pipettes
- Precision water bath or thermostatically controlled chamber (± 1°C)
- Vortex mixer
- Autoclave

PREPARATION OF DEHYDRATED MEDIUM

Always shake before use

Dissolve 50.7g of powder in 1 litre of distilled water, mix until a homogenous suspension is obtained.

Dispense in bottle. Sterilize 15 minutes in autoclave at 110°C. Cool to room temperature.

VALIDATED PROTOCOL

• Preparation of samples

To be performed following the standard relative to the product involved.

• Enrichment

To detect *Listeria monocytogenes* or *Listeria* spp. in a 25 g (or 25 ml) sample, aseptically weigh out 25 g of the sample to be analysed and add 225 ml of LSB broth.

Incubate for 22 hours or 24 hours at 30°C, depending on the DNA extraction protocol selected.

• Detection of *Listeria monocytogenes* or *Listeria* spp by one of the iQ-Check™ methods

=> Please refer to the instruction manual relevant to the method used

PRECAUTIONS FOR USE



Warning: some of the components of the dehydrated product represent a hazard. Please refer you to the Safety data sheet or to the packaging

- The medium may give the container walls a whitish aspect. This has no incidence on its quality.
- Please ensure Good Laboratory Practices are respected.

PERFORMANCES/QUALITY CONTROL OF THE TEST

Culture performance is controlled using specific strains. Please refer to the control certificate for each product and batch.

QUALITY CONTROL

Every products manufactured and marketed by Bio-Rad is subject to a quality-assurance procedure at all stages, from the reception of raw materials to the marketing of the end-product. Each batch of finished product undergoes quality control and is marketed only if it satisfies the acceptability criteria.

Documentation relative to the production and control of each batch is kept on file.

KEY WORDS

LSB / *Listeria* / Food products / Enrichment / Detection / Broth.

BIBLIOGRAPHY

- **CURTIS G.D.W., MITCHELL R.G., KING A.F. and GRIFFIN E.J. (1989)** : Letters in Applied Microbiology. 8: 95-98.
- **CURTIS G.D.W., NICHOLS W.W. and FALLA T.J. (1989)**: Letters in Applied Microbiology. 8: 169-172.
- **LOVETT J., FRANCIS D.W. and HUNT J.M. (1987)**: Journal of Food Protection. 50: 188-192.
- **PRENTICE G.A. and NEAVES P. (1988)** Bulletin of the International Dairy Federation. 223.
- **VAN NETTEN P., VAN DE VEN A., PERALES I. and MOSSEL D.A.A. (1988)**: International Journal of Food Microbiology. 6: 187-198.