

PRODUCT INFORMATION

Listeria Chromogenic Agar Base according to Ottaviani and Agosti (ALOA)
ISO

Cat. No. L12-133

DESCRIPTION

Listeria Chromogenic Agar Base according to Ottaviani and Agosti (ALOA) is a selective medium for the presumptive isolation and identification of *Listeria monocytogenes* and *Listeria* spp. in food and clinical samples.

The X-glucoside chromogenic gives all Listeria species a blue color due to their β -glucosidase enzyme. Other organisms that have that enzyme, like Enterococci, are inhibited by the selective agents. The differential activity is also obtained by lipase C substrate, responsible for the opaque white halo that surrounds *L. monocytogenes*.

FORMULA (g/L)

| | | | |
|------------------------------------|--------|--|--------|
| Enzymatic Digest of Casein | 6.0 g | Glucose | 2.0 g |
| Bacteriological Agar | 13.5 g | Magnesium Sulfate | 0.5 g |
| Sodium Chloride | 5.0 g | Sodium Hydrogen Phosphate | 2.5 g |
| Sodium Pyruvate | 2.0 g | Yeast Extract | 10.0 g |
| Magnesium Glycerophosphate | 1.0 g | Lithium Chloride | 10.0 g |
| Enzymatic Digest of Animal Tissues | 18.0 g | 5-bromo-4-chloro-3-indolyl- β -D-glycopyranoside | 0.05 g |

Final pH: 7.2 \pm 0.2 at 25 °C

*Grams per liter may be adjusted or formula supplemented to obtain desired performance.

PREPARATION

Mix 35.275 grams of the medium in 470 mL of purified water until evenly dispersed. Heat with repeated stirring and boil for one minute to dissolve completely. Distribute and autoclave at 121°C for 15 minutes. If more than 500 mL are being prepared, it is recommended to sterilize at 115 °C for 10 minutes. Cool to 47-50 °C and aseptically add one bottle of Listeria Chromogenic Lipase C Supplement (L12-134) and one vial of Listeria chromogenic Selective Supplement (L12-135). Homogenize gently and dispense into Petri dishes.

QUALITY CONTROL SPECIFICATIONS

1. The powder is homogenous, free flowing and beige.
2. Visually the prepared medium is amber, with trace to light haze.
3. Expected cultural response after 48 hours at 35 °C.

| ORGANISM | RESULT |
|---|--|
| <i>Listeria monocytogenes</i> 4b ATCC 13932 | Good Growth (>50%) Blue green colonies with opaque halo |
| <i>Enterococcus faecalis</i> ATCC 29212 | Inhibited |
| <i>Listeria innocua</i> ATCC 33090 | Blue green colonies without opaque halo |
| <i>Listeria monocytogenes</i> 1/2a ATCC 35152 | Good Growth (>50%) Blue green colonies with opaque halo |
| <i>Escherichia coli</i> ATCC 8739 | Inhibited |

STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 30°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing or if the color has changed from the original color.