

REF

KM0179

YERSINIA SELECTIVE AGAR**IVD****INTENDED USE**

Yersinia Selective Agar is a selective medium for the isolation and enumeration of *Yersinia* spp. from clinical and food samples. This formulation is based on the formulation of Schiemann.⁽¹⁾

The peptones act as carbon, nitrogen and vitamin sources in this medium. Mannitol is a fermentable carbohydrate which when fermented by *Yersinia* spp. causes a localised acid production. Due to the addition of neutral red this gives a red 'bull's eye' appearance to the colony. Sodium deoxycholate and crystal violet are inhibitory agents and when used in conjunction with LS1053 Yersinia (CIN) Selective Supplement inhibit growth of Gram-positive and many Gram-negative organisms. Sodium pyruvate and magnesium sulphate aid the stimulation of organism growth. Sodium chloride maintains the osmotic balance of the medium. Agar is a solidifying agent.

FORMULA***g/L**

Peptones	22.0
Mannitol	20.0
Sodium pyruvate	2.0
Sodium chloride	1.0
Magnesium sulphate	0.01
Sodium deoxycholate	0.5
Neutral red	0.03
Crystal violet	0.001
Agar	12.5

Total**58.0**

* Adjusted / supplemented as required to meet performance requirements

PREPARATION

Suspend 58.0g of the medium in one litre of deionised / purified water. Allow the medium to soak whilst mixing for 10 minutes. Sterilise at 121 °C for 15 minutes then cool to 45-50 °C. Aseptically add 2 vials of LS1053 Yersinia (CIN) Selective Supplement and mix well. Dispense into appropriate sterile containers.

APPEARANCE

	Dehydrated medium	Prepared medium
Appearance	Fine powder	Firm gel
Colour	Beige	Pale red
pH	7.4 ± 0.2	7.4 ± 0.2

MINIMUM QC ORGANISMS

Organism	Ref. No.	Result
<i>Yersinia enterocolitica</i>	NCTC 12982	Growth, clear colonies with red centre
<i>Escherichia coli</i>	NCTC 12241	Inhibited
<i>Staphylococcus aureus</i>	NCTC 12981	Inhibited

RECOMMENDED INCUBATION

Aerobically at 30 ± 1 °C for 21 ± 3 hours.

REFERENCE

⁽¹⁾ Schiemann, D.A. 1979. Synthesis of a selective agar medium for *Yersinia enterocolitica*. *Can. J. Microbiol.* 25: 1298-1304.

STORAGE

Once opened keep powdered medium closed to avoid hydration and use before the expiry date on the label.

