



LAB216 MacConkey Agar No.2

Description

MacConkey Agar No.2 is a modification of MacConkey Agar which contains bile salts No. 2 for the recognition of enterococci. This is especially useful when looking for enterococci in the presence of coliforms and non-lactose fermenters from water, sewage and food products. Enterococci are frequently sought as an index of faecal pollution and appear on this medium as small, intensely coloured red-purple colonies. Non-lactose fermenters appear colourless, whilst bile tolerant Gram-positive organisms, such as staphylococci and non-faecal streptococci, are completely inhibited.

Formulation

	g/litre
Peptone	20.0
Lactose	10.0
Bile salts No.2	1.5
Sodium chloride	5.0
Neutral red	0.05
Crystal violet	0.001
Agar	15.0
Grams per litre	51.6

Appearance

Powder: fine, free-flowing, homogeneous, buff
Finished medium: clear, red-purple gel

pH: 7.2 ± 0.2

Hazard classification

NR – Not regulated

Method for reconstitution

Weigh 51.6 grams of powder and disperse in 1 litre of deionised water. Allow to soak for 10 minutes, swirl to mix and sterilise by autoclaving for 15 minutes at 121°C. Cool to 47°C and mix well before dispensing into Petri dishes. Dry the agar surface prior to use.

Inoculation

Surface inoculation as per user's validated methods.

Incubation

Incubate at 37°C ± 1°C for 18 - 48 hours.

Interpretation

After incubation the plate should be assessed for typical colonies.

Organism	Colony size (mm)	Shape & surface	Colour
<i>Enterococcus faecalis</i>	0.5mm	Convex, entire, glossy	Red-purple
<i>Escherichia coli</i>	3 - 4mm	Convex, entire, glossy	Red-purple
<i>Salmonella</i> spp.	2 – 3mm	Convex, entire, glossy	Translucent
<i>Shigella</i> spp.	2 – 3mm	Convex, entire, glossy	Translucent
<i>Staphylococcus aureus</i>	No growth		



Storage

Dehydrated culture media: 10-25°C away from direct sunlight.

Prepared media: 7 days at 2-8°C in the dark.

Minimum Q.C. organisms

Enterococcus faecalis ATCC 29212

Escherichia coli ATCC 25922

Salmonella typhimurium NCIMB 13284

Staphylococcus aureus ATCC 25923 (inhibited)