

Cepulodin Irgasan Novobiocin(CIN) Agar

Catalog : HB0269-4

CIN Agar is used for the isolation of *Yersinia enterocolitica*.

Approximate Formula:

Ingredients	gm/liter
Tryptone	20.0
Yeast Extract	2.0
Mannitol	20.0
Sodium Chloride	1.0
Deoxysodium Cholate	2.0
Magnesium Sulfate	0.01
Agar	12.0
Irgsan	0.004
Neutral Red	0.03
Crystal Violet	0.001
Strontium Chloride	1.0
Final pH7.5±0.2 at 25°C	

*Adjusted and/or supplemented as required to meet performance criteria.

Directions:

Suspend 58.0g of the medium in one liter of distilled water or deionized water. Mix well and heat with frequent agitation to completely dissolve the powder. Dispense 200ml aliquots into flasks. Sterilize in an autoclave at 121°C (15 lbs.) for 15 minutes. When cooling to 50°C, add one piece of filtration sterilized CIN-1 supplement to each flask. Mix well. Pour into Petri dishes.

Principle and Interpretation:

Tryptone and yeast powder provide nitrogen source, carbon source and trace elements for the growth of bacteria. Mannitol is a fermentable carbon source. Sodium chloride maintained osmotic pressure of medium system. Magnesium sulfate provides trace elements for the growth of bacteria. Sodium deoxycholate and crystal violet can inhibit Gram-positive bacteria. Neutral red is acid-base indicator. Agar is the solidifying agent of the medium.

Appearance:

Dehydrated medium is a free-flowing light pink powder. The prepared medium is a kind of red non-transparent gel.

Precautions:

This medium is for laboratory use only. Dried medium which is past shelf life, caking or color variation cannot be used.

Storage conditions and Shelf life:

CIN Agar must be stored tightly capped in the original container at 5-30°C. The dehydrated medium has a shelf life of 3 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8°C.

Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 26±1°C for 48±2 hours.

Microorganism	Strains Number	Inoculum (CFU)	Growth	Recovery	Remarks
<i>Staphylococcus aureus</i>	ATCC 6538	>10 ³	Inhibited	/	/
<i>Escherichia coli</i>	ATCC 25922	>10 ³	Inhibited	/	/
<i>Yersinia enterocolitica</i>	ATCC 23715	20-200	Luxuriant	≥70%	Pink center colonies, may have bile precipitate

References:

1. Schiemann. 1979. Can. J. Microbiol. 25:1298.
2. Head, Whitty and Ratnam. 1982. J. Clin. Microbiol. 16:615.
3. Weissfeld and Sonnenwirth. 1982. J. Clin. Microbiol. 15:508.
4. Wanger. 2007. In Murray, Baron, Jorgensen, Landry and Pfaller, (ed.), Manual of clinical microbiology. 9th ed. American Society for Microbiology, Washington, D.C.