

**BIOMARK Laboratories-INDIA**

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**TECHNICAL SHEET**

<b>B001I</b>	<b>YERSINIA SELECTIVE AGAR BASE</b>	
<b>Formula</b>		
<b>Ingredients :</b>	<b>gms/lit.</b>	
Peptone,special	20.00	
Yeast extract	2.00	
Mannitol	20.00	
Sodium pyruvate	2.00	
Sodium chloride	1.00	
Magnesium sulphate	0.01	
Sodium deoxycholate	0.50	
Neutral red	0.03	
Crystal violet	0.001	
Agar	12.50	
Final pH (at 25°C) :	7.4 ± 0.2	
<b>Directions :</b>		
Suspend 29.02 grams in 500 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and aseptically add reconstituted contents of 1 vial of Yersinia Selective Supplement (BF102). Mix well before pouring into sterile Petri plates		
<b>Principle :</b>		
The medium differentiates between mannitol fermenting and non-fermenting bacteria. It is selective due to the presence of bile salts and crystal violet which inhibit gram – positive and a number of gram – negative bacteria. Addition of antibiotic supplement makes it highly selective for Yersinia. Typical colonies of Yersinia enterocolitica will form the dark red colonies resembling bulls – eye which are normally surrounded by a transparent border. Colony size and smoothness and ratio of the border to center diameter may vary among different serotypes. Serratia liquefaciens, Citrobacter freundii and Enterobacter agglomerans may resemble Yersinia enterocolitica which can be further identified by biochemical tests.		
<b>QC Tests – (I) Dehydrated Medium</b>		
Colour :	Light yellow to pink	
Appearance :	Homogeneous Free Flowing powder	
<b>(II) Rehydrated medium</b>		
pH (post autoclaving/heating) :	7.4 ± 0.2	
Colour (post autoclaving/heating) :	Orange red	
Clarity (post autoclaving/heating) :	Clear to slightly opalescent	
<b>(III) Q.C. Test Microbiological</b>		
Cultural characteristics observed with added Yersinia Selective Supplement (BF102) after an incubation at 22-32°C for 24-48 hours.		
MICROORGANISM (ATCC )	GROWTH	COLOUR OF COLONY
Yersinia enterocolitica (27729)	Good-luxuriant	Translucent with dark pink centre & bile precipitate
Yersinia enterocolitica (23715)	Good-luxuriant	Translucent with dark pink centre & bile precipitate
Yersinia enterocolitica (9610)	Good-luxuriant	Translucent with dark pink centre & bile precipitate
Enterococcus faecalis (29212)	Inhibited	--
Escherichia coli (8739)	Inhibited	--
Escherichia coli (25922)	Inhibited	--
Staphylococcus aureus (25923)	Inhibited	--
Staphylococcus aureus (6538)	Inhibited	--
Proteus mirabilis (25933)	Inhibited	--
Pseudomonas aeruginosa (27853)	Inhibited	--

Refer disclaimer Overleaf

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<b>Precautions :</b>	1. For Laboratory Use.				
	2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
<b>Limitations :</b>	1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.				
	2. Yersinia Selective Agar Base are intended for use in the preparation of Yersinia Selective Agar. Although this medium is selective for Yersinia, biochemical testing using pure cultures is necessary for complete identification.				
	3. Due to the selective properties of the medium, some Yersinia strains may be encountered that fail to grow or grow poorly on the complete medium. Some strains of normal enteric organisms may be encountered that are not inhibited or are only partially inhibited on the complete medium, such as Citrobacter freundii, Serratia liquefaciens and Enterobacter agglomerans.				
	4. Growth of Yersinia frederiksenii, Y. kristensenii, Y. pseudotuberculosis and Y. intermedia is not inhibited on the complete medium. Colonies of these organisms must be differentiated from Y. enterocolitica on the basis of additional characteristics.				
<b>Use :</b>	For selective isolation and enumeration of Yersinia enterocolitica from clinical specimens and food samples.				
<b>Storage :</b>	Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.				
<b>Packing :</b>	500 gm. bottle				
<b>Product profile:</b>	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
<b>B001I</b>	58.04 g/l	8.614 L	7.4 ± 0.2	Yersinia Selective supplement (BF102)	121°C/15 min.

**Disclaimer:**

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related BIOMARKLABORATORIES publications.

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