### **BIOMARK Laboratories-INDIA**

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### **TECHNICAL SHEET**

B001I	YERSINIA SELECTIVE AGAR BASE
Formula	
Ingredients:	gms/lit.
Peptone, special	20.00
Yeast extract	2.00
Mannitol	20.00
Sodium pyruvate	2.00
Sodium chloride	1.00
Magnesium sulphat	te 0.01
Sodium deoxychola	ate 0.50
Neutral red	0.03
Crystal violet	0.001
Agar	12.50
Final pH (at 25°C)	: 7.4 <u>+</u> 0.2
Directions	

## **Directions:**

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

# Principle:

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 very among different serotypes Serratia liquefaciens, Citrobacter freundii and Enterobacter agglomerans may resemble Yersinia enterocolitica which can be further identified by biochemical tests.

identified by biochemical tests.										
QC Tests - (I)Dehydrated Medium										
Colour:			Light yellow to pink							
Appearance :			Homogeneous Free Flowing powder							
(II)Rehydrated medium										
pH (post autoclaving/heating) :			7.4 ± 0.2							
Colour (post autoclaving/heating) :			Orange red							
Clarity (post autoclaving/heating):			Clear to slightly opalescent							
(III)Q.C. Test Microbiological										
Cultural characteristics observed with added Yesinia Selective Supplement (BF102) after ar										
incubation at 22-32°C for 24-48 h			T							
MICROORGANISM (ATCC )	GROWT		COLOUR OF COLONY							
Yersinia enterocolitica (27729)	Good-luxuriant			with	dark	pink	center	& bile		
			precipitate							
Yersinia enterocolitica (23715)	Good-lux	xuriant	Translucent	with	dark	pink	centr	e& bile		
			precipitate							
Yersinia enterocolitica (9610)	Good-lux		Translucent	with	dark	pink	centr	e& bile		
			precipitate							
Enterococcus faecalis (29212) Inhibite										
Escherichia coli (8739) Inhibite		ed								
Escherichia coli (25922) Inhibited		t								
Staphylococcus aureus (25923) Inhibite				-	-					
Staphylococcus aureus (6538) Inhibite				-	-					
Proteus mirabilis (25933) Inhibit										
Pseudomonas aeruginosa (27853) Inhibite					-					

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.								
Limitations :	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.								
Use :	For selective isolation and enumeration of Yersinia enterocolitica from clinical								
	specimens and food samples.								
Storage :	Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.								
Packing:	500 gm. bottle								
Product	Reconstitution	Quantity on	рН	Supplement	Sterilization				
profile:		Preparation (500g)							
B001I	58.04 g/l	8.614 L	7.4 <u>+</u>	Yersinia Selective	121°C/15 min.				
	]		0.2	supplement (BF102)	,				

#### 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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