

TECHNICAL SHEET

B515	ENDO AGAR BASE	
Formula		
Ingredients :	gms/lit.	
Peptic digest of animal tissue	10.00	
Lactose	10.00	
Dipotassium phosphate	3.50	
Sodium sulphite	2.50	
Agar	12.00	
Final pH (at 25°C) :	7.5 ± 0.2	
Directions :		
Suspend 38 grams in 1000 ml distilled water. Add 4 ml of 10% Basic Fuchsin (BF052). Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well before pouring into sterile Petri plates. If the solidified culture medium is somewhat too red, then to remove the colour, add a few drops (max. 1 ml/litre) of a freshly prepared 10% Sodium sulphite solution and boil.		
Principle :		
The medium contains peptic digest of animal tissue which provide nitrogen, carbon, vitamins and minerals required for bacterial growth. Sodium sulphite and basic fuchsin (BF) has inhibitory effect on gram-positive microorganisms. Lactose fermenting coliforms produce aldehyde and acid. The aldehyde in turn liberates fuchsin from the fuchsin-sulphite complex, giving rise to a red colouration of colonies. With Escherichia coli, this reaction is very pronounced as the fuchsin crystallizes, exhibiting a permanent greenish metallic luster (fuchsin luster) to the colonies.		
QC Tests - (I) Dehydrated Medium		
Colour :	Cream to yellow	
Appearance :	Homogeneous Free Flowing powder	
(II) Rehydrated medium		
pH (post autoclaving/heating) :	7.5 ± 0.2	
Colour (post autoclaving/heating) :	Orangish pink after addition of BF052	
Clarity (post autoclaving/heating) :	Clear to slightly opalescent gel with fine precipitate	
(III) Q.C. Test Microbiological		
Cultural characteristics observed with added Basic fuchsin (BF052) after an incubation at 35-37°C for 18-24 hours.		
MICROORGANISM (ATCC)	GROWTH	COLOUR OF COLONY
Enterobacter aerogenes (13048)	Good-luxuriant	Pink
Escherichia coli (25922)	Good-luxuriant	Pink to rose red with metallic sheen
Salmonella typhi (6539)	Good-luxuriant	Colourless to pale pink
Shigella sonnei (25931)	Good-luxuriant	Colourless to pale pink
Klebsiella pneumoniae (13883)	Good-luxuriant	Pink, mucoid
Proteus vulgaris (13315)	Good-luxuriant	Colourless to pale pink
Pseudomonas aeruginosa (27853)	Good-luxuriant	Colourless irregular
Enterobacter cloacae (13047)	Good	Pink
Salmonella Typhimurium (14028)	Good-luxuriant	Colourless
Salmonella Enteritidis (13076)	Good-luxuriant	Colourless
Shigella flexneri (12022)	Good-luxuriant	Colourless
Streptococcus faecalis (29212)	None-poor	Pink, small
Staphylococcus aureus (25923)	Inhibited	---
Bacillus subtilis (6633)	Inhibited	---
Precautions :	1. For Laboratory Use.	

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	2.. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
	3. Basic fuchsin is a potential carcinogen and care should be taken to avoid inhalation of the powdered dye and contamination of the skin .				
Limitations :	1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.				
Use:	For preparing Endo Agar to confirm presumptive test for lactose fermenting coliforms.				
Storage:	Dehydrated medium- below 30°C Prepared medium – 2 to 8°C. Away from light to avoid photooxidation.				
Packing:	500 gm. bottle				
Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B515	38g/l	13.15L	7.5 ± 0.2)	10%Basic Fuchsin (BF052)	121°C / 15 minutes