

TECHNICAL SHEET

B191	FOLIC ACID CASEI MEDIUM	
Formula		
Ingredients :		Gms/lit.
Vitamin free Casein acid hydrolysate		10.00
Dextrose		40.00
Sodium acetate		40.00
Dipotassium phosphate		1.00
Monopotassium phosphate		1.00
DL-Tryptophan		0.20
L-Asparagine		0.60
L-Cystine hydrochloride		0.50
Adenine sulphate		0.010
Guanine hydrochloride		0.010
Uracil		0.010
Xanthine		0.020
Sorbitan monooleate complex		0.100
Glutathione		0.005
Magnesium sulphate		0.400
Sodium chloride		0.020
Ferrous sulphate		0.020
Manganese sulphate		0.015
Riboflavin (vitamin B ₂)		0.001
p-Amino benzoic acid (PABA)		0.002
Pyridoxine hydrochloride		0.004
Thiamine hydrochloride		0.0004
Calcium pantothenate		0.0008
Nicotinic acid		0.0008
Biotin		0.00002
Final pH (at 25°C) : 6.7 ± 0.1		
Directions :		
Suspend 9.4 gms.in 100 ml distilled water and add 50 mg ascorbic acid. Heat to boiling to dissolve the medium completely.For assay dispense 5ml medium per assay tube (containing increasing amount of Standard on the unknown) and make the total volume to 10 ml with distilled water. Sterilize by autoclaving at 15lbs pressure (121°C) for 5 minutes. Cool immediately.		
Principle :		
Normal persons have a normal serum folic acid level of 9.9ng/ml. This level is greatly altered in case of abnormalities and also when the body is under a diseased state. Folic acid casei medium is used for the microbiological assay of folic acid in blood serum using Lactobacillus casei ATCC 7469 as the test organism. This medium is based on the formulation of Flynn et al, modified by Baker et al and waters and mollin. The test organism used in vitamin assay generally requires three media. i.e. culture maintenance medium, a inoculation medium and a test medium. The latter is usually a chemically defined medium that contains all the ingredients and nutrients essential for growth of the test organisms except the material under study. Similarly folic acid casei medium contains all the essential nutrients for the growth of L.casei except folic acid. Therefore additions of folic acid in specified increasing concentrations gives a similar increase in the growth response of L.casei.		
QC Tests – (I)Dehydrated Medium		
Colour :		Off white
Appearance :		Homogeneous Free Flowing powder

Refer disclaimer Overleaf

(II) Rehydrated medium						
pH (post autoclaving/heating) :		6.7 ± 0.2				
Colour (post autoclaving/heating) :		Light amber				
Clarity (post autoclaving/heating) :		Clear				
(III) Q.C. Test Microbiological						
Cultural characteristics observed after 16-18 hrs at 35-37°C.						
MICROORGANISM (ATCC)			GROWTH			
LACTOBACILLUS CASEI (ATCC 7469)						
Precautions :		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.				
Use :		Used for the microbiological assay of folic acid in blood serum using Lactobacillus casei ATCC 7469 as the test organism.				
Storage :		Dehydrated medium- Between 2-8°C Prepared medium- Use freshly prepared medium.				
Packing :		500 gm bottle				
Product profile:		Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B191		93.91 g/l	1.06 L	6.7 ± 0.2	Ascorbic acid	121°C / 15 minutes

Disclaimer:

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