BIOMARK Laboratories-INDIA

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TECHNICAL SHEET

B079	**TOLUDINE BLUE DNA AGAR**
Formula	
Ingredients :	**gms/lit.**
Deoxyribonucleic acid (DNA)	0.30
Calcium chloride	0.0055
Sodium chloride	10.00
Toluidine blue	0.083
Tris (hydroxymethyl) amino methane	6.1
Agar	10.00
Final pH (at 25°C) : 9.0 ± 0.2	
Directions :	
Suspend 26.48 gms. in 1000ml. distilled water. Heat to boiling to dissolve the medium completely and continue to boil for 1 to 2 minutes. Sterilization is not necessary. Dispense into sterile petri plates.	
Principle :	
DNA in the medium enables the detection of DNase activity which depolymerizes the DNA resulting in the formation of a clear zone around the microbial growth. Inclusion of toluidine blue aids in detection of DNase activity by the production of a visible bright rose – pink coloured reaction due to its metachromatic properties. Tris amino methane forms the buffering system. Sodium chloride and calcium chloride provides the ions and also maintains osmotic equilibrium. Agar is the solidifying agent.	

QC Tests – (I)Dehydrated Medium	
Colour :	Light yellow to light grey
Appearance :	Homogeneous Free Flowing powder
(II)Rehydrated medium	
pH (post autoclaving/heating) :	9.0 ± 0.2
Colour (post autoclaving/heating) :	Blue
Clarity (post autoclaving/heating) :	Clear to slightly opaescent
(III)Q.C. Test Microbiological	
Cultural characteristics observed after 18 hrs old BHI Broth culture is heated in a boiling water batch for 15 minutes and subcultured on Toluidine Blue DNA Agar and the DNase activity is observed within 4-5 hours at 35°C.	
MICROORGANISM (ATCC)	DNASE ACTIVITY
Staphylococcus aureus (12600)	Positive reaction, pink haloes extending 1mm beyond the well
Staphylococcus epidermis (14990)	Negative reaction

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 :	For detection of thermostable deoxyribounclease activity.
Storage :	Dehydrated medium- below 30°C Prepared medium– Between 2 to 8°C.
Packing :	500 gm. bottle

Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B079	26.48g/l	18.88L	9.0 ± 0.2	NIL	Sterilization is not necessary