

<b>B562</b>	<b>TYROSINE AGAR (ISP MEDIUM NO.7)</b>				
<b>Formula</b>					
<b>Ingredients :</b>		<b>gms/lit.</b>			
L-Asparagine		1.000			
L-Tyrosine		0.500			
Dipotassium phosphate		0.500			
Magnesium sulphate		0.500			
Sodium chloride		0.500			
Trace salt solution (ml)		1.000			
Agar		20.000			
<b>Trace salt solution contains</b>		<b>Mg/litre</b>			
Ferrous sulphate, 7H <sub>2</sub> O		1.360			
Copper chloride, 2H <sub>2</sub> O		0.027			
Cobalt chloride, 6H <sub>2</sub> O		0.040			
Sodium molybdate		0.025			
Zinc chloride		0.020			
Boric acid		2.850			
Manganese chloride		1.800			
Sodium tartarate		1.770			
Final pH (at 25°C) : 7.3 ± 0.1					
<b>Directions :</b>					
Suspend 23.74 gms (the equivalent weight of dehydrated medium per litre) of dehydrated medium in 1000 ml distilled water containing 15ml glycerol. 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 pour into sterile petri plates.					
<b>Principle :</b>					
International Streptomyces Project Medium No. 7 (Tyrosine Agar) is recommended for the isolation and enumeration of Streptomyces species. It is used for the differentiation of streptomyces species based on tyrosine utilization. The medium contains L-tyrosine which is utilized by streptomyces species. Zone of clearance around the colony indicate tyrosine hydrolysis. Trace elements provide essential factors for the growth of streptomyces species. Inoculate the medium by streaking the isolate to be tested onto the agar surface with a sterile inoculating loop. The medium may need to be incubated for upto 3 weeks to allow positive hydrolytic reactions to develop. Examine plates at regular intervals for growth and hydrolysis.					
<b>QC Tests – (I) Dehydrated Medium</b>					
	Colour :	Cream to yellow			
	Appearance :	Homogeneous Free Flowing powder			
<b>(II) Rehydrated medium</b>					
	pH (post autoclaving/heating) :	7.3 ± 0.1			
	Colour (post autoclaving/heating) :	Yellow			
	Clarity (post autoclaving/heating) :	Clear to slightly Opalescent gel			
<b>(III) Q.C. Test Microbiological</b>					
Cultural characteristics observed after 48-72 hrs. at 25-30°C. (Tyrosine hydrolysis is observed upto 3 weeks)					
	MICROORGANISM (ATCC )	GROWTH	Tyrosine hydrolysis		
	Streptomyces achromogenes (12767)	Good - luxuriant	Positive reaction, clear zones around the colonies		
	Streptomyces albus (3006)	Good - luxuriant	Positive reaction, clear zones around the colonies		
	Streptomyces lavendulae (8664)	Good - luxuriant	Positive reaction, clear zones around the colonies		
	Streptomyces lividans (19844)	Good - luxuriant	Positive reaction, clear zones around the colonies		
	Nocardia asteroides	good	Negative reaction, No clear zones.		
<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.				
<b>Use :</b>	For the isolation characterization of Streptomyces species as per International streptomyces project.				
<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>B562</b>	23.74 g/l	21.06 L	7.3 ± 0.1	Glycerol	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 BIOMARK LABORATORIES publications.

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