

For the isolation and identification of *Corynebacterium diphtheriae*.

Formula in g/l			
Peptic digest of animal tissue.....	20,00	Sodium chloride.....	5,00
L-Cystine	0,24	Sodium thiosulphate	0,43
Agar.	15,00		

Final pH at 25°C: 7,4 ± 0,2

Principle:

Tinsdale LAB-AGAR™ is a selective medium for the diagnostic of diphtheria, a disease of the upper respiratory tract.

Peptic digest of animal tissue provides nitrogen, vitamins, minerals and amino acids essential for growth. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Sodium thiosulfate provides Sulfur and L-Cystine is the indicator for H₂S production. Bovine serum is an additional source that provides growth factors for the microorganisms. Potassium tellurite is an inhibitor of most Gram negative bacteria and most of the upper respiratory tract normal flora. Due to the production of H₂S, the potassium tellurite is reduced, forming an halo surrounding the colony.

Haemophilus, *Klebsiella*, *Neisseria*, *Staphylococcus* and *Streptococcus* species grow as dark, brown colonies without halos.

Preparation: suspend 40,67 grams of the medium in 900 ml of distilled water. Mix well and dissolve by heating with frequent agitation until complete dissolution. Sterilize in autoclave at 121°C for 15 minutes. Cool to 50°C and add 100 ml of Horse Serum (ref. SL 0116) and 1 ml of Potassium Tellurite 3,5 % Solution (ref. SL 0030). Mix well and pour into Petri dishes.

The prepared medium should be stored at 2-8°C. The color is amber, slightly opalescent.

Technique:

- ★ Inoculate and incubate at 37 ± 1°C during 18-48 hours.

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 30°C
- ★ The expiration date is indicated on the label.

Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 37 ± 1°C and observed after 18 - 48 hours.

Microorganisms	Growth	Colony color
<i>Corynebacterium diphtheriae</i> ATCC 8028	Good	Brown- black with halo
<i>Biotype gravis</i>		
<i>Corynebacterium diphtheriae</i> ATCC 8028	Good	Brown- black with halo
<i>Biotype mitis</i>		
<i>Streptococcus pyogenes</i> ATCC 19615	Good	Brown-black without halo

Packaging: 500 g

Supplements: Horse Serum	100 ml	Ref. SL 0116
Potassium Tellurite 3,5 % Solution	100 ml	Ref. SL 0030

