

TM 1295 - STREPTOMYCES MEDIUM

INTENDED USE

For cultivation and maintenance of *Streptomyces kanamyceticus*.

PRODUCT SUMMARY AND EXPLANATION

Streptomyces i.e. aerobic Actinomycetes usually inhabit soil. In humans, the infections are limited to actinomycotic mycetoma. *Streptomyces* are considered to be a treasure for production of antibiotics. *Streptomyces kanamyceticus* is especially useful for the production of kanamycin A, B and also acetyltransferases. Streptomyces Medium is used for the cultivation and maintenance of *S. kanamyceticus*. This species is of significant use as kanamycin antibiotic is prepared (extracted) using these fungi.

COMPOSITION

Ingredients	Gms / Ltr
Glucose	5.000
L-Glutamic acid	4.000
Monopotassium phosphate	1.000
Sodium chloride	1.000
Magnesium sulphate, 7H ₂ O	0.700
Ferrous sulphate, 7H ₂ O	0.003
Agar	25.000

PRINCIPLE

Though many carbon sources have been used for the growth of *S. kanamyceticus*, glucose is found to be the most suitable carbon source for the production of antibiotic from it. L-Glutamic acid is the nitrogen source. The salts provide essential ions for the growth of *S. kanamyceticus*.

INSTRUCTION FOR USE

- Dissolve 36.34 grams in 1000 ml. distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and dispense as desired.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Off -white to light yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light amber coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.0±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period



<i>Streptomyces kanamyceticus</i>	12853	50-100	Luxuriant	>=70%	25-30°C	7 days
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PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.








Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

- Rodney A, Shukla A and Majumdar. African Journal of Biotechnology Vol 4 (9). 909-910, 2005.
- Balows A., Truper H. G., Dworkin M., Harder W., Schleifer K. H., (Ed.), The Prokaryotes, 1992, 2nd Edition, Vol. III, Springer-Verlag.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For Lab Use Only
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