

TM 131 – PEPTONE YEAST EXTRACT IRON AGAR (ISP MEDIUM NO.6)

INTENDED USE

For cultivation and maintenance of *Streptomyces* as per International Streptomyces project.

PRODUCT SUMMARY AND EXPLANATION

Peptone Yeast Extract Iron Agar (ISP Medium No. 6) is recommended by International Streptomyces Project for the cultivation and maintenance of *Streptomyces* species.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	15.000
Proteose peptone	5.000
Yeast extract	1.000
Ferric ammonium citrate	0.500
Dipotassium hydrogen phosphate	1.000
Sodium thiosulphate	0.080
Agar	15.000

PRINCIPLE

This medium consists of Peptone, proteose peptone and yeast extract which provide carbon, nitrogen, sulphur, vitamin B complex and other essential growth nutrients. Dipotassium hydrogen phosphate gives the medium good buffering capacity. Ferric ammonium citrate and sodium thiosulphate together serve as hydrogen sulphide indicator system.

INSTRUCTION FOR USE

- Dissolve 37.58 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 pour into sterile petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Yellow coloured clear to slightly opalescent gel forms in petri plates.
pH (at 25°C)	: 6.7 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
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<i>Streptomyces lavendulae</i>	8664	50-100	Good-luxuriant	>=50%	30-32°C	18-48 Hours
<i>Streptomyces achromogenes</i>	12767	50-100	Good-luxuriant	>=50%	30-32°C	18-48 Hours
<i>Streptomyces albus subsp. albus</i>	3006	50-100	Good-luxuriant	>=50%	30-32°C	18-48 Hours

PACKAGING:

In pack size of 100 gm and 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

1. Atlas R. M., 1993, Handbook of Microbiological Media, Parks, L.C., (Ed.), CRC Press, Inc.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, American Public Health Association, Washington, D.C.
5. Shirling E. B., and Gottlieb D., 1966, Methods for Characterization of Streptomyces species, Int. J. Syst. Bacteriol., 16:313.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

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

***For Lab Use Only**
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