TM 2295 – PSEUDOMONAS AGAR, MODIFIED (FOR FLUORESCEIN)

INTENDED USE
For detection of fluorescein production by *Pseudomonas* species in accordance with FDA BAM, 1998.

PRODUCT SUMMARY AND EXPLANATION
Pseudomonas Agar (for Fluorescein) is based on the formula described by FDA BAM for the detection of fluorescein production, a water soluble, chloroform insoluble fluorescent pigment by *Pseudomonas* species. The medium enhances the elaboration of fluorescein by *Pseudomonas* and inhibits the pyocyanin formation. The fluorescein pigment diffuses from the colonies of *Pseudomonas* into the agar and shows yellow fluorescent colouration. Some *Pseudomonas* strains produce small amounts of pyocyanin resulting in a yellow-green colouration.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	10.000
Proteose peptone	20.000
Anhydrous dibasic potassium phosphate	1.500
Magnesium sulphate	0.730
Agar	15.000

PRINCIPLE
The medium consists of Peptic digest of animal tissue which provides the essential nitrogenous nutrients, carbon, sulfur and trace elements for the growth of *Pseudomonas*. These nutrients are also conducive to the production of fluroescein. Peptone and phosphorous in the medium enhance the production of pyoverdin/ fluorescein pigment. Dipotassium phosphate buffers the medium while magnesium sulphate provides necessary cations for the activation of fluorescein production. Salt concentration exceeding 2% affects pigment production. UV illumination may be bactericidal, so make sure that there is good growth before placing culture under UV light. The presence of *Pseudomonas* is confirmed by a positive oxidase test.

INSTRUCTION FOR USE
- Dissolve 47.23 grams in 1000 ml purified / distilled water containing 10 ml glycerol.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C. 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) : 7.0±0.2

INTERPRETATION
Cultural characteristics observed with added 1% glycerol after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Pseudomonas aeruginosa	9027	50-100	Luxuriant	>=70%	Greenish Yellow	35-37°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Luxuriant	>=70%	Greenish Yellow	35-37°C	18-24 Hours
Pseudomonas aeruginosa	17934	50-100	Luxuriant	>=70%	Greenish Yellow	35-37°C	18-24 Hours

PACKAGING:
In pack size of 500 gm bottles.

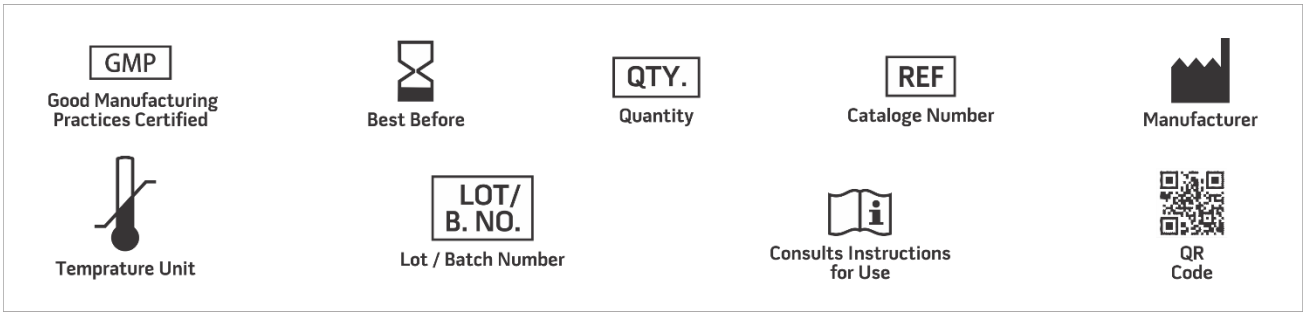
STORAGE
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protec from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened fo the first time, note the time and date on the label space provided on the container. After the desired amount of mediun 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. FDA, U.S. 1998. Bacteriological Analytical Manual. 8 ed. Gaithersburg, MD: AOAC International.
2. MacFaddin, J. F. 1985. Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria vol. 1. Baltimore: Williams and Wilkins.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
4. 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.



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

***For Lab Use Only**
Revision: 08 Nov., 2019