TM 266 – PSUEDOMONAS AGAR P (FOR FLUORESCEIN)

INTENDED USE

For detection of fluorescein production by *Pseudomonas* species

PRODUCT SUMMARY AND EXPLANATION

Pseudomonas Agar (For Fluorescein) is based on the formula described by King et al and as modified in the U.S. Pharmacopeia 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	10.000
Dipotassium hydrogen phosphate	1.500
Magnesium sulphate	1.500
Agar	15.000

PRINCIPLE

Tryptone and proteose peptone provide the essential nitrogenous nutrients, carbon, sulphur and trace elements for the growth of *Pseudomonas*. Dipotassium hydrogen 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. A pyocyanin-producing Pseudomonas strain will usually also produce fluorescein. It must, therefore, be differentiated from other simple fluorescent Pseudomonads by other means. Temperature can be a determining factor as most other fluorescent strains will not grow at 35°C. Rather, they grow at 25-30°C.

INSTRUCTION FOR USE

- Dissolve 38 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 after incubation.

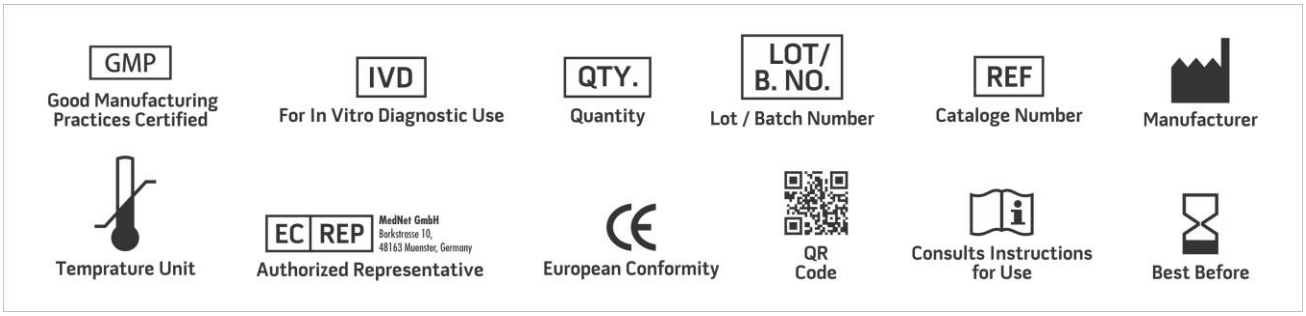
Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the colony	Incubation Temperature	Incubation Period
Pseudomonas aeruginosa	17934	50-100	Luxuriant	>=70%	Greenish yellow	35-37°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Luxuriant	>=70%	Greenish yellow	35-37°C	18-24 Hours
Pseudomonas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

PACKAGING:
In pack size of 100 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. King, Ward and Raney, 1954, J. Lab. Clin. Med., 44 : 301.
2. The United States Pharmacopoeia, 2006, USP29/NF24, The United States Pharmacopeial Convention, Rockville, MD.
3. MacFaddin J., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**
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