

PRODUCT INFORMATION

Product Type: PETRI DISHES 90mm

Cat No. PD580 - ACATHAMOEBA MEDIUM

Intended Use:

Page's Amoeba Saline (PAS): Page's saline with 1.5% Agar it is used for the isolation of *Naegleria* and *Acanthamoeba* from tissues and soil samples.

Principle and Uses:

Non-nutritive solid medium used primarily for the cultivation, isolation, and observation of free-living amoebae (e.g., *Acanthamoeba spp.*) and other protozoa when used in combination with a bacterial food source (commonly *Escherichia coli*). The medium provides an ionic environment that supports protozoan survival while preventing significant bacterial overgrowth due to the absence of nutrients.

For laboratory and research use only.

Page's Saline is a balanced salt solution containing inorganic salts that maintain osmotic balance and provide an appropriate ionic environment for protozoa.

Page's Saline supplies essential ions necessary for maintaining cellular integrity and physiological activity of amoebae and other protozoa.

Agar acts as the solidifying agent to create a stable surface for microscopic observation and migration of amoebae.

Because the medium is non-nutritive, protozoa are typically cultured on the surface after inoculation with a suitable bacterial food source. Amoebae can grow and migrate on this surface when supplied with a bacterial lawn (e.g. heat-killed or live *E. coli*), while the inorganic salts maintain osmotic balance and provide essential ions. The absence of organic nutrients in the agar itself helps limit unwanted bacterial overgrowth and favors the intended trophozoite/cyst-bacteria interaction model.

Limitations

The medium is non-nutritive; it is not intended for general bacterial growth or enumeration, and requires the addition of a bacterial food source for protozoan cultivation.

Not suitable for routine bacterial culture or enumeration.

For specific organisms (*Legionella*, *Naegleria*, *Acanthamoeba*), appropriate selective media or additional overlay methods may be required for isolation or confirmation.

Further identification (morphology, immunology, molecular methods) is necessary for definitive organism identification.

Dehydration of plates may impair amoebal migration.

Always work under sterile conditions to prevent contamination, and follow safety guidelines when handling living organisms.

Additionally, be aware of the specific requirements and preferences of the *Acanthamoeba* strain you are working with, as different strains may have varying sensitivities to environmental conditions.

Reference

1. ATCC Medium 1323 Page's Amoeba Saline, Page, f.c.1988. A new key to freshwater and soil gymnamoebae. Freshwater Biological Association, Ambleside.
 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. Practicals & Viva in Medical Parasitology by Sehgal-2003.
 5. Water quality-Detection and enumeration of Legionella - Part 2: Direct membrane filtration method for waters with low bacterial counts. ISO 11731-2:2004(E).
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Composition

Sodium chloride (NaCl)	0.120 g/L
Magnesium sulphate (MgSO ₄ .7H ₂ O)	0.004 g/L
Calcium chloride (CaCl ₂ .2H ₂ O)	0.004 g/L
Disodium hydrogen phosphate (Na ₂ HPO ₄)	0.142 g/L
Potassium dihydrogen phosphate (KH ₂ PO ₄)	0.136 g/L
Agar	15 g/L

Storage: 2-8°C, Protect from dehydration, Avoid freezing

Final pH: 7.0 ± 0.5

Appearance: Colorless, Clear to slightly opalescent

Package contents: 10 plates in a package

Exp. Date: Printed on label and on the item.

Required materials not supplied: Laboratory equipment as required.

Warning and Precautions - For professional use only. Follow good microbiological lab practices while handling specimens and culture. Do not use Petri dishes if they show evidence of microbial contamination, discoloration, drying, cracking, or other signs of deterioration. Avoid freezing and overheating. The Petri Dishes may be used / inoculated up to the expiration date and incubated for the recommended incubation times. After use and prior to discarding, specimen containers and all contaminated material, including the used culture media and contaminated culture containers, must be sterilized or incinerated by validated procedures. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.

If excessive moisture is observed, invert the bottom over an off-set lid and allow to air dry in order to prevent formation of a seal between the top and bottom of the plate during incubation. Storage Instructions: On receipt, store plates in the dark at 2–8 °C. Avoid freezing and overheating. Do not open until ready to use.

Waste Disposal

After interpretation all items should be destroyed by standard incineration methods.
