ACETAMIDE AGAR

Dehydrated medium for the differentiation of nonfermentative gram-negative bacteria, particularly *Pseudomonas aeruginosa*.

TYPICAL FORMULA (g/L)

Acetamide	10.0
Sodium Chloride	5.0
Dipotassium Phosphate	1.39
Monopotassium Phosphate	0.73
Magnesium Sulphate	0.5
Phenol Red	0.012
Agar	15.0
Final pH 6.9 ± 0.2	

DESCRIPTION

ACETAMIDE AGAR is used in the differentiation of nonfermentative gram-negative bacteria, particularly *Pseudomonas aeruginosa*.

PRINCIPLE

The ability to deaminate acetamide (acylamidase activity) has been found to be most actively accomplished by *P. aeruginosa, Comamonas (Pseudomonas) acidovorans, Achromobacter xylosoxidans subsp. xylosoxidans (Alcaligenes xylosoxidans)* and *Alcaligenes faecalis* (*odorans*). Deamination of acetamide produces ammonia which increases the pH of the medium causing a corresponding color change from yellow-orange to purplish-red.

PREPARATION

Suspend 32.632 g of powder in 1 litre of distilled or deionized water. Heat to boiling and shake until completely dissolved. Sterilise at 121°C for 15 minutes. Dispense in final tubes and allow to solidify in a slant position.

TECHNIQUE

Inoculate the Acetamide Agar slant with a loopful of culture emulsified in Tryptic Soy Broth. Incubate inoculated slant at 36 ± 1°C and observe daily for 4 days and again at 7 days before discarding as negative.

INTERPRETATION OF RESULTS

Deamination of the acetamide is indicated by a pronounced purplish-red color of the medium. Complete identification requires determination of the Gram reaction, cellular morphology, biochemical reactions, etc.

STORAGE

The powder is very hygroscopic: store the powder at 10-30°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident.
Store prepared media at 2-8°C.

WARNING and PRECAUTIONS

The product is not classified as hazardous by current legislation and does not contain harmful substances in concentrations of ≥1%. The product must be used only by properly trained operators.

DISPOSAL of WASTE

Disposal of waste must be carried out according to national and local regulations in force.

REFERENCES

1. Gilardi, G.L. 1974. Nonfermentative gram-negative bacteria encountered in clinical specimens. Antonie van Leewenhoek J. Microbiol. Serol. 39:229-242.
2. Stainier, R.Y., N.J. Palleroni, and M. Doudoroff. 1966. The aerobic pseudomonads: a taxonomic study. J. Gen. Microbiol. 43:159- 271.
3. Pickett, M.J., and M.M. Pedersen. 1970. Characterization of saccharolytic nonfermentative bacteria associated with man. Can. J. Microbiol. 16:351-362.

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PRODUCT SPECIFICATIONS

NAME
ACETAMIDE AGAR

PRESENTATION
Dehydrated culture medium

STORAGE
10-30°C

PACKAGING

Code	Content	Packaging
610312	500 g	500 g of powder in plastic bottle
620312	100 g	100 g of powder in plastic bottle

pH OF THE MEDIUM
6.9 ± 0.2

USE
ACETAMIDE AGAR is used in the differentiation of nonfermentative gram-negative bacteria, particularly *Pseudomonas aeruginosa*.

TECHNIQUE
Refer to technical sheet of the product.

SHELFLIFE
4 years

QUALITY CONTROL
1. Control of general characteristics, label and print
2. Sterility control
   7 days at 25 ± 1°C, in aerobiosis
   7 days at 36 ± 1°C, in aerobiosis
3. Microbiological control
   Inoculum for productivity: 10-100 UFC/ml
   Inoculum for specificity: ≤ 10^4 UFC/ml
   Incubation conditions:72 +/- 3 hours at 36 +/- 1°C

Microorganisms		Growth
Pseudomonas aeruginosa	ATCC 10145	Good/ Positive deamination reaction (purplish-red color within 7 days)

TABLE of SYMBOLS

LOT Batch code	Caution, consult accompanying documents	Manufacturer	Contains sufficient for <n> tests
REF Catalogue number	Temperature limitation	Use by	

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