Technical Data Sheet

Minimal Glucose Agar for Ames Test

Ordering number: 1.46690.0120

Min. Glucose Agar is designed for AMES test to examine chemical components for toxic/cancerogenic properties.

Ten settle plates each with a diameter of 90 mm are single-bagged in transparent, hydrogen peroxide impermeable sleeves (non-irradiated). The sleeves consist of polypropylene with a barrier of PE-EVOH-PE.

Mode of Action

The AMES test is utilised as an initial screen to determine the mutagenic potential of chemicals and drugs. The principle is to detect point mutations using amino-acid requiring strains.

The Minimal-Glucose-Agar plate is taken as a bottom agar for the mutagenicity assay and includes the minimum ingredients for bacterial growth.

Typical Composition

Glucose monohydrate	20 g/l
Magnesium sulphate heptahydrate	0.2 g/l
Citric acid monohydrate	2 g/l
Di-Potassium hydrogen phosphate	10 g/l
Sodium hydrogen phosphate	3.5 g/l
Agar	13 g/l

The appearance of the medium is clear and colorless. The pH value is in the range of 6.8-7.2.

Application and Interpretation

Each plate is provided with a label including a data matrix code for paperless plate identification. The code consists of a two-dimensional 20-digit serial number, which harbors the following information:

digits 1-3: here code 690 (corresponds to article 146690); digits 4-9: lot number; digits 10-14: batch specific individual number; digits 15-20: expiration date (YY/MM/DD).

Please check each agar plate before using it on sterility and pay attention to aseptic handling in order to avoid false positive results.

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Storage and Shelf Life

The product can be used for tests until the expiry date if protected from light and properly sealed at +15 °C to +25 °C.

Condensation can be prevented by avoiding quick temperature shifts and mechanical stress.

The testing procedures as described on the CoA can be started up to the expiry date printed on the label.

Disposal

Please mind the respective regulations for the disposal of used culture medium (e.g. autoclave for 20 min at 121 °C, disinfect, incinerate etc.).

Quality Control

Control Strains	Expected Results
Salmonella typhimurium TA 98	Conform to OECD Guideline 471
Salmonella typhimurium TA 100	Conform to OECD Guideline 471
Salmonella typhimurium TA 1535	Conform to OECD Guideline 471
Salmonella typhimurium TA 1537	Conform to OECD Guideline 471
Escherichia coli WP2 uvrA	Conform to OECD Guideline 471

Please refer to the actual batch related Certificate of Analysis.

Literature

OECD Guideline for testing chemicals TG 471: Bacterial Reverse Mutation Test.

Council Regulation (EC) No 440/2008 B.13/14: Mutagenicity – Reverse Mutation Test Using Bacteria.

Mortelsmans, K. and Zeiger, E. (2000): The Ames *Salmonella* / microsome mutagenicity assay.

Ordering Information

Product	Cat. No.	Pack size
Min. Glucose Agar Ames Test	1.46690.0120	120 x 90 mm plates

Merck KGaA, 64271 Darmstadt, Germany
Fax: +49 (0) 61 51 / 72-60 80
mibio@merckgroup.com
www.merckmillipore.com/biomonitoring

Find contact information for your country at:
www.merckmillipore.com/offices
For Technical Service, please visit:
www.merckmillipore.com/techservice