

PRODUCT INFORMATION

Nutrient Agar with MUG

Cat. No. N14-101

DESCRIPTION

Nutrient Agar is used for cultivating a wide variety of non-fastidious organisms. Pancreatic Digest of Gelatin and Beef Extract provide amino acids, peptides, carbohydrates, vitamins, and electrolytes for bacterial growth. 4-methylumbelliferyl- β -D-glucuronide (MUG) allows for the rapid detection of *E. coli*. MUG is used as a substrate to detect glucuronidase activity, since its degradation by this enzyme produces the fluorescent compound 4-methylumbelliferone, visible under UV light. Agar is the gelifying agent.

FORMULA (g/L)

Pancreatic Digest of Gelatin	5.0 g	Agar	15.0 g
Beef extract	3.0 g	MUG	0.1 g

Final pH: 6.8 \pm 0.2 at 25 °C

*Grams per liter may be adjusted or formula supplemented to obtain desired performance.

PREPARATION

Mix 25 grams of the medium in one liter of purified water until evenly dispersed. Heat with repeated stirring and boil for one minute to dissolve completely. Distribute and autoclave at 121°C for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

1. The powder is homogenous, free flowing and beige.
2. Visually the prepared medium is light beige to amber, with trace to light haze.
3. Expected cultural response after 18-24 hours at 35 °C.

ORGANISM	GROWTH	FLUORESCENCE
<i>Enterobacter aerogenes</i> ATCC 13048	Good Growth	Negative
<i>Escherichia coli</i> ATCC 11775	Good Growth	Positive
<i>Escherichia coli</i> ATCC 25922	Good Growth	Positive

<i>Salmonella typhimurium</i> ATCC 14028	Good Growth	Negative
<i>Shigella flexneri</i> ATCC 12022	Good Growth	Negative

STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 30°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing or if the color has changed from the original color.