Product Name : Yeast Nitrogen Broth (without Amino Acids and Ammonium Sulfate)

Medium is used for classifying yeasts based on carbon and nitrogen requirements.

TYPICAL FORMULA (G/L)

Monopotassium Phosphate 1.0
Magnesium Sulfate 0.5
Sodium Chloride 0.1
Calcium Chloride 0.1
<Vitamins>
Biotin ..... 2.0 µg
Calcium Pantothenate ..... 400.0 µg
Folic Acid ..... 2.0 µg
Inositol ..... 2,000.0 µg
Niacin ..... 400.0 µg
p-Aminobenzoic Acid ..... 200.0 µg
Pyridoxine Hydrochloride ..... 400.0 µg
Riboflavin ..... 200.0 µg
Thiamine Hydrochloride ..... 400.0 µg
<Compounds Supplying Trace Elements>
Boric Acid ..... 500.0 µg
Copper Sulfate ..... 40.0 µg
Potassium Iodide ..... 100.0 µg
Ferric Chloride ..... 200.0 µg
Manganese Sulfate ..... 400.0 µg
Sodium Molybdate ..... 200.0 µg
Zinc Sulfate ..... 400.0 µg
Final pH = 4.5 ± 0.2 at 25°C.

DIRECTIONS

Suspend 1.7 G of base plus nitrogen and carbon sources as required in 100 mL of purifed water. Mix well. Filter sterilize. Prepare the final medium by aseptically pipetting 0.5 mL of the 10× solution into 4.5 mL of purified water. Mix well. Test samples of the finished product for performance using stable, typical control cultures. If necessary, add 5% dextrose, 5% ammonium sulfate, 0.02% DL-methionine, 0.02% DL-tryptophan and 0.01% L-histidine for supplement.

DESCRIPTION

Yeast Nitrogen Broth (without Amino Acids and Ammonium Sulfate) is used for classifying yeasts based on carbon and nitrogen requirements. Yeast Nitrogen Broth (without Amino Acids and Ammonium Sulfate) contains all essential nutrients and vitamins necessary for the cultivation of yeasts except amino acids and a source of nitrogen and carbohydrate.

TECHNIQUE

Inoculate the prepared tube medium very lightly with the test organism. Incubate at 25°C for 6-7 days. After incubation (6-7 days up to 20-24 days), shake the tubes to suspend growth. Measure growth turbidimetrically at 660 nm wavelength using a spectrophotometer. Turbidimetric readings on assay tubes should be comparable to the control.

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Product Name : Yeast Nitrogen Broth (without Amino Acids and Ammonium Sulfate)

QUALITY CONTROL

Dehydrated medium
Appearance: free-flowing, homogeneous.
Color: light yellowish-beige.
Prepared medium
Appearance: clear.
Color: colorless.
Incubation conditions: 25 –30 °C / 6 –7 days (up to 20-24 days.

Microorganism	ATCC	Without supplement	With supplement
Kloeckera apiculata	9774	none to poor	good
Saccharomyces cerevisiae	9080	none to poor	good

PERFOMANCE AND LIMITATIONS

Yeasts grown on a rich medium may carry a reserve of nitrogen in the form of protein. Possible errors due to this reserve are eliminated by making two serial transfers in the complete medium. When the first transfer is seven days old, the culture is shaken and one loopful is transferred to a second tube of the complete medium containing the same source of nitrogen. If a positive test is obtained when the second culture is seven days old, the organism being tested assimilates this particular nitrogen source.

STORAGE

The powder is very hygroscopic: store the powder at room temperature, 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 medium at 2-6°C.

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PACKAGING

Cat. No : MB-Y0796 Yeast Nitrogen Broth (without Amino Acids and Ammonium Sulfate)	500 G