

Glucose Broth

Intended Use

Glucose Broth is used for cultivation and fermentation studies of microorganisms.

Summary

Waisbren, Carr and Dunnett used Glucose Broth for testing antibiotic sensitivity by the tube dilution method. This medium is also used to study glucose fermentation where pH indicator is not desired. Glucose Broth was developed to exclude the ingredients like beef extract that would contain small amount of carbohydrates. Thus, the glucose fermentation studies can be performed more accurately using only pure 0.5% glucose as the source of carbohydrate.

Principle

Tryptone and glucose serve as sources of essential nutrients and energy respectively to support the growth of many fastidious organisms. The tryptone used is free of carbohydrates and glucose acts as source of energy by being the only fermentable carbohydrate. The broth gives rapid growth and hastens the early development of injured cells. Sodium chloride maintains the osmotic equilibrium.

Formula*

Ingredients	g/L
Tryptone	10.0
Glucose	5.0
Sodium Chloride	5.0
Final pH (at 25°C)	7.3 ± 0.2

*Adjusted to suit performance parameters.

Directions

1. Bring the Glucose Broth vial to the room temperature 22°C-30°C.
2. Use Glucose Broth as per required application.

Quality Control

Appearance: Pale yellow coloured, clear solution without any precipitate.

Cultural Response: Cultural characteristics observed after an incubation of 18-24 hours at 30°C-35°C.

Organism (ATCC)	Growth
<i>Escherichia coli</i> (25922)	Good
<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Typhimurium</i> (14028)	Good

Note: Inoculum cfu for good growth is 10-100.

Remarks

1. Do not use media bottles that exhibit any damage, cracks, microbial contamination, discoloration, drying or other sign of deterioration.
2. Good laboratory practices and hazard precautions must be observed at all times.
3. After use media containers, sample, sample containers and other contaminated materials must be sterilized or incinerated before discarding.
4. All autoclaved biohazards should be disposed off in accordance with state and local environmental regulations.
5. Only qualified personnel who have been trained in microbiological procedures should handle all infected specimens and inoculated culture media.

6. User should ensure that any machinery or apparatus used and by chance contaminated must be safely disinfected or sterilized. The environment in which microbiological cultures are handled must also be taken into account.

Storage and Stability

1. Store the ready to use Glucose Broth at 15°C-25°C in a cool, dry place away from light.
2. Stability of the kit is as per expiry date mentioned on the label.

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

References

1. Waisbren, Carr and Dunnett, 1951, Am. J. Clin. Path., 21:884.
2. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat. No.	Product Description	Pack Size
203070120005	Ready Prepared Tube	50 x 5 mL

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.
