

Fluid Thioglycollate Medium, Prepared - Instructions for Use

Intended Use

BACGro™ Fluid Thioglycollate Medium prepared media is intended for laboratory use as a general non-selective growth media for a wide variety of organisms. It is not intended for use in diagnosis, treatment, or prevention of disease in humans. BACGro™ Fluid Thioglycollate Medium conforms to harmonized USP/EP/JP performance requirements.

Product Summary

Fluid Thioglycollate Medium is a general-purpose medium that supports the growth of both aerobic bacteria as well as anaerobic bacteria without the use of an anaerobic chamber. The inclusion of reducing agents lowers the oxygen content of the broth. The medium also contains a small amount of agar that results in an oxygen gradient from the top to the bottom. This allows obligate aerobes and obligate anaerobes to grow in the same sample- obligate aerobes will grow at the top of the medium while obligate anaerobes will be able to grow in the bottom of the tube. Facultative organisms may grow throughout the medium. Casein Peptone and Yeast Extract provide the nitrogen source, along with essential vitamins for growth. The oxidation-reduction potentials of the medium are lowered by Sodium Thioglycollate and L-Cystine. Resazurin acts as the oxidation indicator and will turn pink in the presence of oxygen. Dextrose is included as a carbon source while sodium chloride maintains osmotic balance. The addition of agar limits the diffusion of oxygen throughout media.

The performance of BACGro™ Fluid Thioglycollate Medium conforms to the Harmonized United States Pharmacopeia (USP)¹, European Pharmacopeia (EP)² and Japanese Pharmacopeia (JP)³ Standards.

Formulation* (per Liter)

Casein Peptone	15.0 g
Yeast Extract	5.0 g
Dextrose	5.5 g
Sodium Chloride	2.5 g
L-Cystine	0.5 g
Resazurin	0.001 g
Agar	0.75 g
Sodium Thioglycollate	0.5 g
Total	29.75 g/L

*Formula may be supplemented and/or adjusted as required to meet performance criteria

Directions

For use in laboratory testing. Aseptically inoculate the medium with the specimen and incubate at the directed temperature and time duration required for growth promotion.

Precautions

This product is for laboratory use only and should only be used by qualified, trained laboratory personnel. Personnel should always use proper aseptic technique and observe all biohazardous precautions. All microbiological cultures should be presumed to be infectious.

Avoid using this product if it shows evidence of microbial contamination, discoloration (i.e., dark amber), or other signs of deterioration.

Avoid ingestion, inhalation, or contact with skin and mucous membranes. If contact occurs, flush the area with clean water.

Quality Control Specifications

Gold Standard Diagnostics tests each lot of manufactured BACGro™ culture media utilizing appropriate control organisms and specifications as documented on the Certificate of Analysis. End users should perform quality control testing in accordance with government regulatory requirements and accreditation guidelines. For optimal growth of strict aerobes, containers should be vented during the incubation. This may be achieved by loosening the caps. The following specifications are routinely used for testing:

Appearance (prepared): Light beige to light amber, clear or slight haze, with no precipitate or debris.

pH (prepared): 6.9 – 7.3 at 25°C

Organism Performance:

Strain ID	Inoculum	Incubation	Result
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		Time	Temp.	Environment	
<i>C. sporogenes</i> (ATCC® 19404)	<100 CFU	18-72 hr.	30-35° C	Aerobic	Growth
<i>P. aeruginosa</i> (ATCC® 9027)	<100 CFU	18-72 hr.	30-35° C	Aerobic	Growth
<i>S. aureus</i> (ATCC® 6538)	<100 CFU	18-72 hr.	30-35° C	Aerobic	Growth
<i>B. subtilis</i> (ATCC® 6633)	<100 CFU	18-72 hr.	30-35° C	Aerobic	Growth

Limitations of the Procedure

This product is not labeled for use as a medical device, and is not intended to diagnose, treat, or prevent disease.

Due to variation in nutritional requirements, some strains may be encountered that grow poorly in this medium.

Further biochemical or serological testing is required for the identification of organisms grown in this medium.

Storage and Expiration

BACGro™ Fluid Thioglycollate Medium should be stored at 2 – 25 degrees Celsius.

The expiration date printed on the label is applicable to media stored as directed.

Catalog Numbers

PLM3220- Fluid Thioglycollate Medium, 20mL Test Tube

PLM3230- Fluid Thioglycollate Medium, 100mL Jar

PLM3235- Fluid Thioglycollate Medium, Bagged 100mL Jar

PLM3250- Fluid Thioglycollate Medium, 500mL Bottle

¹ United States Pharmacopoeial Convention. United States Pharmacopoeia and National Formulary (USP-NF).

² Directorate for the Quality of Medicines and the Council of Europe. The European Pharmacopoeia.

³ Pharmaceuticals and Medical Devices Agency, Ministry of Health, Labor, and Welfare. Japanese Pharmacopoeia.

Revision History:

Revision	Description	Effective Date
02	Periodic Review. Added "Avoid using this product...deterioration." under the Precautions section. Added "For optimal growth...loosening the caps." under Quality Control specifications	07-MAR-2023
01	Document creation	01-MAY-2020