BACGro™ Culture Media

GOLD STANDARD DIAGNOSTICS

Standard Methods Agar - Instructions for Use

Intended Use

BAC*Gro*™ Standard Methods Agar, when prepared as directed, is intended for the enumeration of bacteria in water, food, and dairy products. Standards Method Agar is not intended for use in diagnosis, treatment, or prevention of disease in humans.

Product Summary

Standard Methods Agar- also commonly referred to as Plate Count Agar or Tryptone Glucose Yeast Agar- complies with the formulation cited by the American Public Health Association[1] and the Association of Official Analytical Chemists[2]. The media was first described by Buchbinder et al.[3] who found that peptones alone could not support the growth of pathogens within food and water, but determined that the inclusion of Yeast Extract and dextrose is vital for recovery of viable cells.

Standard Methods Agar includes casein peptone as the nitrogen source along with yeast extract and dextrose. Agar serves as a gelling agent.

Formulation* (per Liter)

Casein Peptone	5.0 g
Yeast Extract	2.5 g
Dextrose	1.0 g
Agar	15.0 g
Total	23.5 g/L

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

Directions

1. Suspend 23.5 g of Standard Methods Agar powder into 1L purified water.
2. Stir while heating. Bring to a soft boil to completely dissolve.
3. Autoclave at 121 degrees Celsius for 15 minutes.
4. Cool prior to use.

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.

Quality Control Specifications

Gold Standard Diagnostics tests each lot of manufactured BAC*Gro*™ 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. The following specifications are routinely used for testing:

Appearance (dehydrated): Light beige, homogenous, free flowing powder, free of debris

Appearance (prepared): Amber, clear to hazy

pH (prepared): 6.8 – 7.2 at 25°C

Organism Performance:

Strain ID	Inoculum	Incubation			Result
		Time	Temp.	Environment	
E. coli (ATCC® 25922)	≤100 CFU	69 – 75 hr.	30° C	Aerobic	Growth
E. coli (ATCC® 8739)	≤100 CFU	69 – 75 hr.	30° C	Aerobic	Growth
S. aureus (ATCC® 25923)	≤100 CFU	69 – 75 hr.	30° C	Aerobic	Growth
B. subtilis (ATCC® 6633)	≤100 CFU	69 – 75 hr.	30° 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.

Storage and Expiration

BAC*Gro*™ Standard Methods Agar should be stored at 2 – 30 degrees Celsius. Because of the hygroscopic nature of dehydrated culture media, it should be stored in a dry place and the lid should remain tightly sealed. Media should be discarded if it is not free flowing or shows discoloration.

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

Catalog Numbers

DCM2001- Standard Methods Agar, 500g
DCM2005- Standard Methods Agar, 5kg
DCM2010- Standard Methods Agar, 10kg

[1]Marshall, R. T. (ed.). 1993. Standard methods for the microbiological examination of dairy products, 16th ed. American Public Health Association, Washington, D.C. 2.

[2]Cunnif, P. (ed.). 1995. Official methods of analysis AOAC International, 16th ed. AOAC International, Arlington, VA

[3]Buchbinder, L., Y. Baris, E. Alff, E. Reynolds, E. Dillon, V. Pessin, L. Pincus, and A. Strauss. 1951. Studies to formulate new media for the standard plate count of dairy products. Pub. Health Rep. 66:327-340.

Revision History:

Revision	Description	Effective Date
03	Updated incubation time from 72 hr. to 69 – 75 hr. to match PWS & ISO 11133.	13-MAR-2024
02	Periodic Review. No changes required.	14-JUL-2022
01	Document creation	20-AUG-2019