

## Brucella Agar (NCM0090)

### Intended Use

Brucella Agar is used for the cultivation of *Brucella* spp. and other fastidious microorganisms in a laboratory setting. Brucella Agar is not intended for use in the diagnosis of disease or other conditions in humans.

### Description

Brucella Agar is prepared according to the APHA formula for Albimi Broth. Brucella Agar is a general-purpose medium for the cultivation of *Brucella* spp. and fastidious microorganisms including *Streptococcus pneumoniae*, *Streptococcus viridans*, and *Neisseria meningitidis*. With the addition of blood, Brucella Agar is used to determine bacterial hemolytic reactions. Brucella Agar can also be used as a base for the isolation of *Campylobacter* spp.

### Typical Formulation

Enzymatic Digest of Casein	10.0 g/L
Enzymatic Digest of Animal Tissue	10.0 g/L
Yeast Extract	2.0 g/L
Sodium Chloride	5.0 g/L
Dextrose	1.0 g/L
Sodium Bisulfite	0.1 g/L
Agar	15.0 g/L

Final pH: 7.0 ± 0.2 at 25°C

Formula may be adjusted and/or supplemented as required to meet performance specifications.

### Precaution

Refer to SDS

### Preparation

1. Suspend 43 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.
4. Cool to 45-50°C.

### Quality Control Specifications

**Dehydrated Appearance:** Powder is homogeneous, free flowing, and light beige.

**Prepared Appearance:** Prepared medium is trace to slightly hazy and yellow beige. Prepared with 5% sheep blood, medium is opaque and red.

**Expected Cultural Response:** Cultural response on Brucella Agar at 35 ± 2°C under CO<sub>2</sub> (Brucella sp.only) and examined for growth after 18 - 96 hours incubation.

Microorganism	Approx. Inoculum (CFU)	Expected Results
<i>Brucella ovis</i> ATCC® 25840	10 – 300	Growth
<i>Escherichia coli</i> ATCC® 25922	10 - 300	Growth
<i>Streptococcus pyogenes</i> ATCC® 19615	10 - 300	Growth

The organisms listed are the minimum that should be used for quality control testing.

# Technical Specification Sheet



## **Test Procedure**

Refer to appropriate references for a complete discussion on the isolation and identification of *Brucella* spp.

## **Results**

Refer to appropriate references for results.

## **Expiration**

Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

## **Limitation of the Procedure**

Due to nutritional variation, some strains may be encountered that grow poorly or fail to grow on this medium.

## **Storage**

Store sealed bottle containing the dehydrated medium at 2 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

## **References**

1. Hausler, W. J. (ed.). 1976. Standard methods for the examination of dairy products, 14<sup>th</sup> ed. American Public Health Association, Washington, D.C.
2. MacFaddin, J. D. 1985. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol. 1, p. 110-114. Williams & Wilkins, Baltimore, MD.
3. Baron, E. J., L. R. Peterson, and S. M. Finegold. 1994. Bailey & Scott's diagnostic microbiology, 9<sup>th</sup> ed. Mosby-Year Book, Inc., St. Louis, MO.
4. Isenberg, H.D. (ed.). 1992. Clinical Microbiology procedures handbook. American Society for Microbiology, Washington, D.C.

Effective Date: 4/11/2019

Revision: 0

