POTATO INFUSION AGAR (7532)

Intended Use
Potato Infusion Agar is used for the isolation of *Brucella abortus*.

Product Summary and Explanation
Potato Infusion Agar is prepared according to the formula used by Stockman and MacFadyean for the isolation of *Brucella abortus*. Brucellosis is a zoonotic disease with a domestic-animal reservoir.[1] Transmission by milk, milk products, meat, and direct contact with infected animals is the usual route of exposure.[1] Potato Infusion Agar permits luxuriant growth of characteristic colonies of *B. abortus* from infected materials, and may be used with excellent results in mass cultivation of *Brucella* in the preparations of vaccines and antigens.

Principles of the Procedure
Infusion from Potatoes, Beef Extract, and Enzymatic Digest of Animal Tissue provides nitrogen, vitamins, and amino acids in Potato Infusion Agar. Dextrose and Glycerol are used as carbon sources. Sodium Chloride maintains the osmotic balance in the medium. Agar is the solidifying agent.

Formula / Liter
Potatoes, Infusion from Solids	200 g
Beef Extract	5 g
Enzymatic Digest of Animal Tissue	10 g
Dextrose	10 g
Sodium Chloride	5 g
Agar	15 g

Final pH: 6.8 ± 0.2 at 25°C
Formula may be adjusted and/or supplemented as required to meet performance specifications.

Supplement
Glycerol, 20 mL

Precautions
1. For Laboratory Use.
2. *Brucella* spp. are classified as Biosafety Level 3 pathogens. All manipulations with live cultures and antigens must be confined to a Class II biological safety cabinet (BSC).[1]

Directions
1. Suspend 49 g of the medium and 20 mL of glycerol 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.

Quality Control Specifications
Dehydrated Appearance: Powder is homogeneous, free-flowing, and light tan.

Prepared Appearance: Prepared medium is trace hazy with a slight precipitate and light amber.

Expected Cultural Response: Cultural response on Potato Infusion Agar at 35°C under 5 - 10% CO_2 for up to 72 hours of incubation.

Microorganism	Response
Brucella abortus ATCC® 4315	growth
Brucella melitensis ATCC® 4309	growth
Brucella suis ATCC® 4314	growth
Escherichia coli ATCC® 25922	growth
Staphylococcus aureus ATCC® 25923	growth
Streptococcus pyogenes ATCC® 19615	growth

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

Test Procedure
Incubate plates at 35 ± 2°C in 5 - 10% CO_2 for 10 days.[1] Consult appropriate references for a complete discussion on the inoculation and identification of *Brucella* spp.

Results
Refer to appropriate references and procedures for results.

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.

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.

Limitations of the Procedure
1. Due to nutritional variation, some strains may be encountered that grow poorly or fail to grow on this medium.
2. Best results are obtained on freshly prepared medium with a moist surface.

Packaging

Potato Infusion Agar	**Code No.**	**7532A**	**500 g**
		7532B	**2 kg**
		7532C	**10 kg**

References

1. **Moyer, N. P., and L. A. Holcomb.** 1995. *Brucella*, p. 549-555. *In* Murray, P. R., E. J. Baron, M. A. Pfaller, F. C. Tenover, and R. H. Yollken (eds.). Manual of clinical microbiology, 6th ed. American Society for Microbiology, Washington, D.C.
2. **Baron, E. J., L. R. Peterson, and S. M. Finegold.** 1994. Bailey & Scott's diagnostic microbiology, 9th ed. Mosby-Year Book, Inc., St. Louis, MO.

Technical Information

Contact Acumedia Manufacturers, Inc. for Technical Service or questions involving dehydrated culture media preparation or performance at (410)780-5120 or fax us at (410)780-5470.