

Veal Infusion Agar • Veal Infusion Broth

Intended Use

Veal Infusion Agar is used for cultivating fastidious microorganisms with or without added enrichment.

Veal Infusion Broth is used for cultivating fastidious microorganisms.

Summary and Explanation

The nutritive factors of veal infusion media permit luxuriant growth of fastidious microorganisms. Veal Infusion Agar may be used as a base with blood, ascitic fluid, serum or other enrichments. Veal infusion media are specified for use in the examination of food.^{1,2} Veal Infusion Agar is specified in *Official Methods of Analysis of AOAC International* for culturing eggs and egg products, and as a maintenance medium for *E. coli*.³ Veal Infusion Broth is recommended for culturing *E. coli* in the AOAC procedure for invasiveness of mammalian cells.³

User Quality Control

Identity Specifications

Difco™ Veal Infusion Agar

Dehydrated Appearance:	Very light beige, free-flowing, homogeneous.
Solution:	4.0% solution, soluble in purified water upon boiling. Solution is light to medium amber, very slightly to slightly opalescent.
Prepared Appearance:	Light to medium amber, slightly opalescent.
Reaction of 4.0% Solution at 25°C:	pH 7.4 ± 0.2

Difco™ Veal Infusion Broth

Dehydrated Appearance:	Beige, free-flowing, homogeneous.
Solution:	2.5% solution, soluble in purified water. Solution is light to medium amber, clear to very slightly opalescent.
Prepared Appearance:	Light to medium amber, clear to very slightly opalescent with no more than very slight precipitation.
Reaction of 2.5% Solution at 25°C:	pH 7.4 ± 0.2

Cultural Response

Difco™ Veal Infusion Agar or Veal Infusion Broth

Prepare the agar medium per label directions without (plain) and with 5% sterile defibrinated sheep blood (SB). Inoculate and incubate plates at 35 ± 2°C for 18-48 hours under approximately 10% CO₂.

Prepare the broth medium per label directions. Inoculate and incubate at 35 ± 2°C for 18-48 hours.

ORGANISM	ATCC™	INOCULUM CFU	RECOVERY AGAR (PLAIN)/BROTH	RECOVERY AGAR WITH SB
<i>Neisseria meningitidis</i>	13090	10 ² -10 ³	Good	Good
<i>Staphylococcus epidermidis</i>	12228	10 ² -10 ³	Good	Good
<i>Streptococcus mitis</i>	9895	10 ² -10 ³	Good	Good
<i>Streptococcus pneumoniae</i>	6305	10 ² -10 ³	Good	Good

Principles of the Procedure

Infusion from lean veal and peptone provide the nitrogen, vitamins, carbon and amino acids in veal infusion media. Sodium chloride maintains the osmotic balance of the formulations. Agar is the solidifying agent in Veal Infusion Agar.

Formulae

Difco™ Veal Infusion Agar

Approximate Formula* Per Liter	
Lean Veal, Infusion from 500 g.....	10.0 g
Proteose Peptone No. 3.....	10.0 g
Sodium Chloride.....	5.0 g
Agar.....	15.0 g

Difco™ Veal Infusion Broth

Consists of the same ingredients without the agar.

*Adjusted and/or supplemented as required to meet performance criteria.

Directions for Preparation from Dehydrated Product

1. Suspend the powder in 1 L of purified water:
Difco™ Veal Infusion Agar – 40 g;
Difco™ Veal Infusion Broth – 25 g.
Mix thoroughly.
2. Heat with frequent agitation and boil for 1 minute to completely dissolve the powder.
3. Autoclave at 121°C for 15 minutes.
4. Cool the agar medium to 45-50°C and aseptically add sterile serum, defibrinated blood or other enrichment, as desired. Mix thoroughly.
5. Test samples of the finished product for performance using stable, typical control cultures.

Procedure

For a complete discussion on the examination of fastidious microorganisms in food refer to the procedures outlined in the references.¹⁻³

Expected Results

Refer to appropriate references and procedures for results.

References

1. U.S. Food and Drug Administration. 2001. Bacteriological analytical manual, online. AOAC International, Gaithersburg, Md.
2. Downes and Ito (ed.). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.
3. Horwitz (ed.). 2007. Official methods of analysis of AOAC International, 18th ed., online. AOAC International, Gaithersburg, Md.

Availability

Difco™ Veal Infusion Agar

AOAC BAM COMPF

Cat. No. 234310 Dehydrated – 500 g

Difco™ Veal Infusion Broth

AOAC BAM COMPF

Cat. No. 234420 Dehydrated – 500 g
234410 Dehydrated – 10 kg