

B2926 Brucella Agar with Hemin and Vitamin K

Brucella Agar with Hemin and Vitamin K1 with added blood is used for the isolation and subculture of anaerobes.

Composition:

| Ingredients | Grams/Litre |
|--------------------------------|-------------|
| Casein Enzymic Hydrolysate | 10.0 |
| Peptic Digest of Animal Tissue | 10.0 |
| Yeast Extract | 2.0 |
| Dextrose | 1.0 |
| Sodium Chloride | 5.0 |
| Sodium Bisulphite | 0.1 |
| Hemin | 0.1 |
| Vitamin K1 | 0.01 |
| Agar | 15.0 |
| Final pH 7.0 +/- 0.2 at 25°C | |

Store prepared media below 8°C, protected from direct light. Store dehydrated powder in a dry place in tightly-sealed containers at 2-25°C.

Appearance: Tan colored, homogeneous, free flowing powder.

Gelling: Firm

Color and Clarity: Light amber colored, clear to slightly opalescent gel. After the addition of 5%

sterile defibrinated sheep blood, a cherry red opaque gel forms in petri plates.

Directions:

Suspend 43.1 g of Brucella Agar with Hemin and Vitamin K1 in 1000 ml of distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 minutes. Cool to 50°C and aseptically add sterile 5% v/v defibrinated sheep blood.

Principle and Interpretation:

This medium also supports luxuriant growth of the Brucella species. With the incorporation of blood and other nutritious substances such as Vitamin K1 in the medium, it facilitates the cultivation of a variety of fastidious, anaerobic organisms. The casein enzymic hydrolysate, peptic digest of animal tissue, yeast extract and dextrose are a rich source of nutrients. The presence of hemin and Vitamin K1 supports the growth of other fastidious bacteria such as the Bacteroides species and the grampositive spore bearer species Clostridium.

Cultural characteristics after 48 hours at 35°C when incubated anaerobically.

| Organisms (ATCC) | Growth |
|---------------------------------|--------|
| Brucella abortus (4315) | +++ |
| Baceteroides fragilis (25285) | +++ |
| Clostridium perfringens (13124) | +++ |



References:

- 1. Sutter, V.L. et al., (1985). Wadsworth Anaerobic Bacteriology Manual, 4th Edition. Star Publishing Co. Belmont Ca.
- 2. Onderdonk, A.B., et al., (1974). Infect. Immun.. 10, 1256.
- 3. Weinstein, W. M., et al., (1974). Infect. Immun. 10, 1250.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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