BRUCELLA AGAR (w/ 5% SHEEP BLOOD)

INTENDED USE
Remel Brucella Agar (w/ 5% Sheep Blood) is a solid medium recommended for use in qualitative procedures for primary isolation and cultivation of both fastidious aerobic and anaerobic microorganisms.

SUMMARY AND EXPLANATION
Brucella Agar was originally developed for isolation of *Brucella* spp. from potentially contaminated material such as dairy products.[1] It is prepared according to the formulation of the American Public Health Association for Albimi broth.[2,3] Brucella Agar (w/ 5% Sheep Blood) is recommended for isolation of obligate and facultative anaerobes from clinical specimens.[4,5]

PRINCIPLE
Casein and meat peptones supply nitrogen, amino acids, and peptides necessary for bacterial growth. Dextrose is a ready source of energy. Yeast extract provides B-complex vitamins and enhances growth. Sodium chloride is a source of essential electrolytes and maintains osmotic equilibrium. Sodium bisulfite is a reducing agent. Sheep blood provides growth factors required by certain anaerobic organisms and allows for demonstration of hemolysis by aerobic and anaerobic bacteria. Agar is a solidifying agent.

REAGENTS (CLASSICAL FORMULA)*

Casein Peptone	15.0	g	Dextrose	1.0	g
Meat Peptone	5.0	g	Sodium Bisulfite	0.1	g
Sodium Chloride	5.0	g	Sheep Blood	5	%
Yeast Extract	2.0	g	Agar	15.0	g
			Demineralized Water	1000.0	ml

pH 7.0 ± 0.2 @ 25°C

*Adjusted as required to meet performance standards.

PROCEDURE
1. Inoculate and streak the specimen as soon as possible after it is received in the laboratory.
2. If material is being cultured directly from a swab, roll the swab over a small area of the agar surface and streak for isolation.
3. Incubate aerobically or anaerobically at 33-37°C for up to 72 hours.
4. Confirm the growth of anaerobic organisms by subculture to aerobic blood agar plate.

QUALITY CONTROL
All lot numbers of Brucella Agar (w/ 5% Sheep Blood) have been tested using the following quality control organisms and have been found to be acceptable. This quality control testing meets or exceeds CLSI standards.[6] Testing of control organisms should be performed in accordance with established laboratory quality control procedures. If aberrant quality control results are noted, patient results should not be reported.

CONTROL	INCUBATION	RESULTS
**Bacteroides fragilis* ATCC® 25285	Anaerobic, up to 48 h @ 33-37°C	Growth
**Clostridium perfringens* ATCC® 13124	Anaerobic, up to 48 h @ 33-37°C	Growth, beta hemolysis
**Escherichia coli* ATCC® 25922	Aerobic, 18-24 h @ 33-37°C	Growth
**Fusobacterium nucleatum* ATCC® 25586	Anaerobic, up to 48 h @ 33-37°C	Growth
**Peptostreptococcus anaerobius* ATCC® 27337	Anaerobic, up to 48 h @ 33-37°C	Growth
**Prevotella melaninogenica* ATCC® 25845	Anaerobic, up to 48 h @ 33-37°C	Growth
**Staphylococcus aureus* ATCC® 25923	Aerobic, 18-24 h @ 33-37°C	Growth
**Streptococcus pneumoniae* ATCC® 6305	Aerobic, 18-24 h @ 33-37°C	Growth, alpha hemolysis
**Streptococcus pyogenes* ATCC® 19615	Aerobic, 18-24 h @ 33-37°C	Growth, beta hemolysis

*CLSI recommended organism

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Refer to the front of Remel *Technical Manual of Microbiological Media* for **General Information** regarding precautions, product storage and deterioration, specimen collection, storage and transportation, materials required, quality control, and limitations.

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remel

12076 Santa Fe Drive, Lenexa, KS 66215, USA
General Information: (800) 255-6730 Website: www.remel.com Email: remel@remel.com
Local/International Phone: (913) 888-0939 International Fax: (913) 895-4128