

CM 20687 – FEELEY GORMAN BROTH (F.G. BROTH)

INTENDED USE

For the cultivation of Legionella species.

PRODUCT SUMMARY AND EXPLANATION

Feeley et al formulated this medium, which is used as nonselective enrichment medium for isolation of Legionella species. Legionella is a gram-negative bacterium, including species that cause legionellosis or Legionnaires' disease, most notably L. pneumophila. Legionella species are the causative agent of the human Legionnaires' disease and the lesser form, Pontiac fever. Legionella transmission occurs via aerosols- inhalation of mist droplets containing the bacteria. Common sources include cooling towers, domestic hot-water systems, fountains, and similar disseminators that tap into a public water supply. Natural sources of Legionella include freshwater ponds and creeks. Person-to-person transmission of Legionella has not been demonstrated.

Legionella are nutritionally fastidious and require L-cysteine and iron salts for their growth, which are provided in the medium. Legionella species are highly pathogenic microorganisms. Certain safety precautions must be taken when handling Legionella cultures.

COMPOSITION

Ingredients	Gms / Ltr
Acicase	17.500
Beef extract	3.000
Starch	1.500
L-Cysteine hydrochloride	0.400
Ferric pyrophosphate, soluble	0.250

PRINCIPLE

The medium consists of Acicase, Beef extract, L-cysteine hydrochloride and ferric pyrophosphate act as sources of nutrients. Incubation should be carried out in the presence of 2.5% carbon dioxide but if it exceeds the limit, Legionella growth is inhibited due to formation of acidic condition. Legionella species can be identified by their characteristic fluorescence in presence of UV light. Since Legionella disease is primarily a pulmonary infection, prevention and containment of aerosols is essential.

INSTRUCTION FOR USE

Dissolve 22.65grams in 1000 ml purified / distilled water.

Heat if necessary to dissolve the medium completely.

Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Cool to 45 - 50°C.

Mix well and dispense into sterile tubes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium : Yellow coloured, clear to slightly opalescent solution in tubes.

pH (at 25°C) : 6.9 ± 0.2

INTERPRETATION

Cultural characteristics observed in presence of 2.5% Carbon dioxide (CO₂) after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Fluorescence (under 366nm)	Incubation Temperature	Incubation Period
Legionella bozemannii	33217	50-100	Good- luxuriant	Blue-white	35-37°C	4 Days
Legionella micdadei	33218	50-100	Good- luxuriant	None	35-37°C	4 Days
Legionella pneumophila	33153	50-100	Good- luxuriant	Bright yellow	35-37°C	4 Days

PACKAGING:

Inpacksizeof500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.













Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

Afteruse,prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Feeley J. C. et al, 1978, J. Clin. Microbiol., 8(3): 320.
3. Feeley J. C. et al, 1979, J. Clin. Microbiol., 10(4):437.
4. Herbert G. A. et al, 1959, Ann. Intern. Med., 92(1):45.
5. Herbert G. A. et al, 1980, Ann. Intern. Med., 92(1):53.
6. MacFaddin J. F., Vol. I, 1985, Media for Isolation Cultivation-Identification-Maintenance of Medical Bacteria, Williams and Wilkins, Baltimore/ London.
7. Ryan K. J., Ray C. G. (Eds.), 2004, Sherris Medical Microbiology, 4th Edition, McGraw Hill.
8. Winn, W. C. Jr. ,1996, Legionella (In: Baron's Medical Microbiology, Barron, S. et al, (Eds.), 4th Edition, University of Texas Medical Branch.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Birkstrasse 10, 48143 Münster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For LabUse Only



