CM 20686 – FEELEY GORMAN AGAR

INTENDED USE

For the isolation and presumptive identification of Legionella species.

PRODUCT SUMMARY AND EXPLANATION

Feeley et al formulated FeeleyGorman Agar, 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. pneumophilia. 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. 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
Agar	17.000

PRINCIPLE

Themedium consists of Acicase, Beef extract, L-cysteine hydrochloride and ferric pyrophosphate act as sources of nutrients. It is recommended to inoculate F.G. Agar and Legionella Agar with supplements simultaneously, as Legionella usually do not grow initially on F.G. agar. 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 39.65 gramsin 1000 ml purified / distilled water.
Heat to boiling 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 pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Yellow coloured, clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 6.9 ± 0.2

INTERPRETATION

Culturalcharacteristics observed in presence of 2.5% Carbon dioxide (CO_2) after incubation.

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

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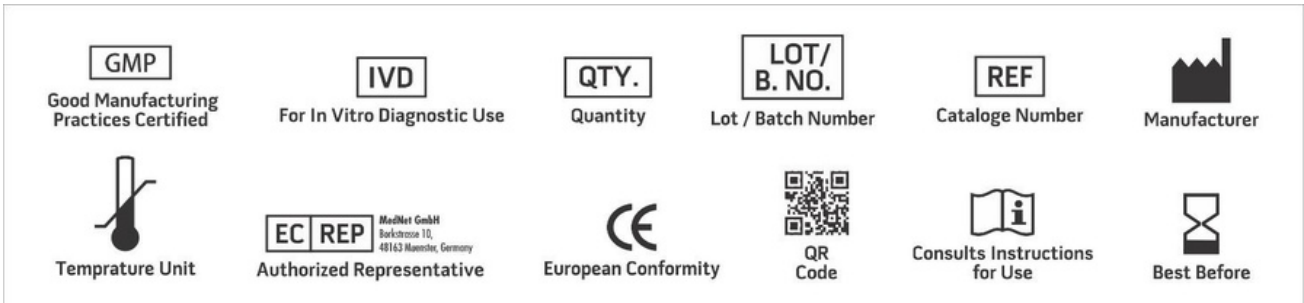
6. Ryan K. J., Ray C. G. (Eds.), 2004, Sherris Medical Microbiology, 4th Edition, McGraw Hill.
7. Winn, W. C. Jr. ,1996, Legionella (In: Baron's Medical Microbiology, Barron, S. et al, (Eds.), 4th Edition, University of Texas Medical Branch.



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

*For LabUse Only