TM 612 – LISTERIA SELECTIVE AGAR (DOUBLE PACK)

INTENDED USE

For selective isolation & cultivation of *Listeria* species from clinical samples.

PRODUCT SUMMARY AND EXPLANATION

Listeria Selective Agar was proposed by Feindt for the cultivation of *Listeria* species from clinical and non-clinical specimens. Obiger and Schonberg reported the superiority of these media to yield *Listeria* from mix-infected specimens. Bockemühl reported suppression of Enterococci by combination of selective agents and acridine dyes. The combination of Acriflavin hydrochloride and Nalidixic acid was recommended by Ralovich et al and Kampelmacher and Van Noorle Jansen for the isolation of *Listeria*. The mix infected specimen is added directly to Listeria Enrichment Broth or subjected to cold enrichment and then cultured on Listeria Selective Agar. Haemolytic forms can be identified by inoculating Blood Agar.

COMPOSITION

Ingredients	Gms / Ltr
Part I	
Tryptone	10.000
Peptone	10.000
Dextrose (Glucose)	1.000
Sodium Chloride	5.000
Thiaminium dichloride	0.005
Acriflavin hydrochloride (Trypaflavin)	0.010
Nalidixic acid	0.040
Agar	13.000
Part II	
Potassium thiocyanate	37.500

PRINCIPLE

This medium consists of Tryptone, Peptone which provides essential nutrients. Thiaminium dichloride is the vitamin B source added to improve the growth of Listeria. Thiocyanate and Nalidixic acid inhibits gram-negative bacteria. Sodium chloride maintains the osmotic equilibrium of the medium.

INSTRUCTION FOR USE

- Dissolve 39.0 grams of Part I and 37.5 grams of Part II in 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 : Part I : Cream to yellow homogeneous free flowing powder Part II : White to cream homogeneous free flowing powder.

Appearance of prepared medium : Yellow coloured clear to slightly opalescent gel forms in Petri plates.

pH (at 25°C) : 7.2 ± 0.2

INTERPRETATION

Cultural characteristics observed in presence of 10% Carbon dioxide (CO_2) after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Enterococcus faecalis	29212	50-100	None-poor	<=10%	35-37°C	48 Hours
Escherichia coli	25922	>=10^3	Inhibited	0%	35-37°C	48 Hours
Listeria innocua	33090	50-100	Luxuriant	>=70%	35-37°C	48 Hours
Listeria ivanovii subsp. ivanovii	19119	50-100	Luxuriant	>=70%	35-37°C	48 Hours
Listeria monocytogenes	19112	50-100	Luxuriant	>=70%	35-37°C	48 Hours
Listeria monocytogenes	19118	50-100	Luxuriant	>=70%	35-37°C	48 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°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

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

REFERENCES

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5. Lebnert C., 1964, Arch. Exp. Vet. Med.,8:891 and 1247.
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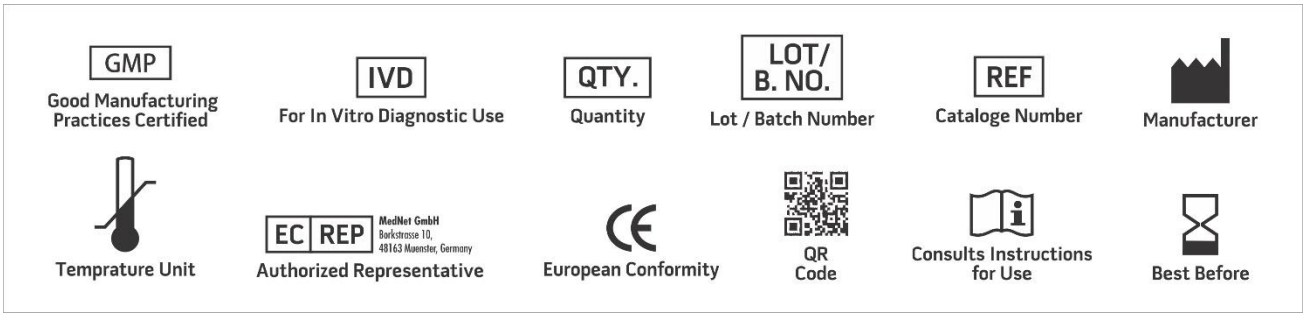

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

Revision: 08 Nov., 2019