TMV 386 - SS AGAR (SALMONELLA SHIGELLA AGAR) (VEG.)

INTENDED USE

For differential and selective isolation of *Salmonella* and *Shigella* species from pathological samples.

PRODUCT SUMMARY AND EXPLANATION

SS Agar (veg) is prepared by using vegetable peptones in place of animal based peptones which makes the medium free of BSE/TSE risks. SS agar (veg) is the modification of SS Agar which is recommended as a differential and selective medium for the isolation of Salmonella and Shigella species from pathological specimens and suspected foodstuffs. Sodium thiosulphate is reduced by certain species of enteric organisms to sulphite and H2S (hydrogen sulphide) and this reductive enzyme process is attributed by thiosulphate reductase. Production of H2S is detected as an insoluble black precipitate of ferrous sulphide, formed upon reaction of H2S with ferric ions or ferric citrate, indicated in the centers of the colonies. Owing to the ingredients of this medium SS Agar (veg) can be considered as a highly selective medium allowing the use of large inoculum directly from different suspected materials like faeces, rectal swabs, contaminated samples containing pathogenic enteric bacilli. On fermentation of lactose by few lactose-fermenting normal intestinal flora,
acid is produced which is indicated by change of colour from yellow to red by the pH indicator-neutral red. Thus these organisms grow as red pigmented colonies. Lactose non-fermenting organisms grow as translucent colourless colonies with or without black centers.

COMPOSITION

Ingredients	Gms / Ltr
Veg Peptone	11.50
Veg Extract	5. 0
Lactose	10.0
Synthetic detergent No. I (veg.)	2. 0
Sodium citrate	10.0
Sodium thiosulphate	8. 5
Ferric citrate	1. 0
Brilliant green	0.00033
Neutral red	0.025
Agar	15.0

PRINCIPLE

Veg Peptone, veg extract provide essential growth nutrients, and serve as nitrogen and carbon source. Lactose is the fermentable carbohydrate. Brilliant green, veg synthetic detergent veg and thiosulphate selectively inhibit gram-positive and coliform organisms.

INSTRUCTION FOR USE

- Dissolve 63 grams in 1000 ml distilled water.
- Heat to boiling with frequent agitation to dissolve the medium completely, do not autoclave or overheat. Overheating may destroy selectivity of the medium.
- Cool to about 50°C. Mix and pour into sterile petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Beige to pinkish beige coloured, homogeneous, free flowing powder.
Appearance of prepared medium : Reddish orange coloured, clear to slightly opalescent gel forms in petri plates.
pH (at 25°C) : 7.0 ± 0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the colony	Incubation Temperature	Incubation Period
Enterobacter aerogenes	13048	50-100	Poor-good	20-40 %	Cream-pink	35 - 37°C	18 – 24 Hours
Enterococcus faecalis	29212	50-100	None-poor	20-40 %	Colourless	35 - 37°C	18 – 24 Hours
Escherichia coli	25922	50-100	Poor-good	20-40 %	Pink	35 - 37°C	18 – 24 Hours
Proteus mirabilis	25933	50-100	Poor-good	20-40 %	Colourless may have black center	35 - 37°C	18 – 24 Hours
Salmonella serotype Enteritidis	13076	50-100	Good-luxuriant	>=50 %	Colourless black center	35 - 37°C	18 – 24 Hours
Salmonella serotype Typhi	6539	50-100	Good-luxuriant	>=50 %	Colourless black center	35 - 37°C	18 – 24 Hours
Salmonella serotype Typhimurium	14028	50-100	Good-luxuriant	>=50 %	Colourless black center	35 - 37°C	18 – 24 Hours
Shigella flexneri	12022	50-100	Good-luxuriant	>=50 %	Colourless	35 - 37°C	18 – 24 Hours

PACKAGING:

In pack size of 100 gm and 500 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

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

REFERENCES

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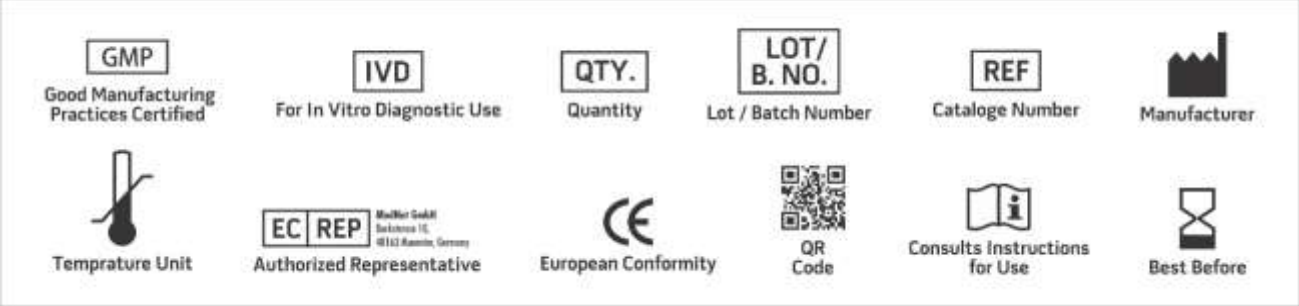

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

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