## Product Name : Salmonella Shigella (SS) Agar Modified

Selective medium for Salmonella and Shigella isolation from clinical specimens, foodstuffs and other samples.

## TYPICAL FORMULA (G/L)

Meat Extract	5.0
Yeast Extract	5.0
Peptone	5.5
Lactose	10.0
Sodium Citrate	1.0
Sodium Thiosulphate	8.5
Ferric Ammonium Citrate	1.5
Bile Salts n°3	1.5
Brilliant Green	0.00033
Neutral Red	0.025
Agar	14.0
Final pH = 7.0 $\pm$ 0.2 at 25°C.	

### DIRECTIONS

Suspend 52.02 G in 1 L of distilled or deionized water. Mix well. Heat to boiling for 1 minute to completely dissolve the powder. DO NOT AUTOCLAVE and avoid overheating. Cool to 45-50°C and dispense into petri dishes.

## DESCRIPTION

Salmonella Shigella (SS) Agar Modified is a highly selective medium for the isolation of *Salmonella* and some *Shigella* species from clinical specimens, foodstuffs and other samples etc. Gram-positive and coliforms or ganisms are inhibited by the action of the selective inhibitory components: brilliant green, bile salts, thiosulphate and citrate. Thiosulphate in combination with iron acts as an indicator for sulphide production, which is indicated by blackening in the centers of the colonies.

## TECHNIQUE

Inoculate by streaking the specimen onto the surface of the medium in order to isolate pure cultures from specimens containing mixed flora. A less selective medium should also be streaked to increase the chance of recovery Incubate at  $36 \pm 1^{\circ}$ C for 18-24 hours. It is recommended to inoculate, in parallel with the Salmonella Shigella (SS) Agar Modified plate, a tube of Selenite Broth (NIER) (MB-S1145N) or of Selenite Cystine Broth (MB-S1150) or of other enrichment media and to incubate them at  $36 \pm 1^{\circ}$ C. After 12-18 hours of incubation subculture from the tube onto another Salmonella Shigella (SS) Agar Modified plate. Incubate the plates at  $36 \pm 1^{\circ}$ C for 18-24 hours. *Salmonella* and other lactose non-fermenters produce opaque, translucent or transparent colonies with or without a black center. *Shigella* colonies are colorless. The few lactose fermenting organisms that develop on the medium are readily differentiated by their reddish, mucoid colonies.

### QUALITY CONTROL

<u>Dehydrated medium</u> Appearance: free-flowing, homogeneous. Color: very light buff to pink. <u>Prepared medium</u> Appearance: very slightly opalescent. Color: red-orange. Incubation conditions: 36  $\pm$ 1°C / 18-24 hours.



# Product Name : Salmonella Shigella (SS) Agar Modified

Microorganism	ATCC	Growth	Characteristics
Shigella flexneri	12022	good	colorless colonies
Salmonella typhimurium	14028	good	Colorless colonies w or w/o black center
Enterococcus faecalis	29212	inhibited	
Staphylococcus aureus	25923	inhibited	
Escherichia coli	25922	partially inhibited	pink to red colonies

### STORAGE

The powder is very hygroscopic: store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-6°C.

### REFERENCES

- 1. Gray L.D. (1995). Escherichia, Salmonella, Shigella and Yersinia, p. 450-456. In Manual of clinical
- microbiology, 6th ed. American society of microbiology.
- 2. Leifson E. (1935). J. Pathol. Bacteriol. 40: 581.
- 3. Rose, H.M., and M.H. Kolodny (1942). J. Lab. Clin. Med. 27: 1081-1083.

### PACKAGING

Cat. No : MB-S1042 Salmonella Shigella (SS) Agar Modified

500 G

