SS AGAR

Ready to use flasks

SS Agar: *Salmonella arizonae*

INTENDED USE: ready to use medium for the selective isolation and differentiation of pathogenic enteric bacilli

TYPICAL FORMULA (g/l)

Beef Extract	5.000
Peptocomplex	5.000
Lactose	10.000
Bile Salts n°3	8.500
Sodium Thiosulphate	8.500
Sodium Citrate	8.500
Ferric Citrate	1.000
Neutral Red	0.025
Agar	13.500
Brilliant Green	0.330 mg

DIRECTIONS

Dissolve the contents of the bottle in a temperature controlled water batch (100°C). Cool to 45-50°C, mix well and distribute into sterile Petri dishes
Final pH 7.0 ± 0.2

DESCRIPTION

SS Agar is a selective and differential medium recommended for the isolation of *Salmonella* and *Shigella* from faeces and other materials, with a direct inoculation or after enrichment in liquid media. SS Agar clearly distinguishes non-lactose-fermenting enteric bacteria from lactose-fermenting ones, the growth of which is permitted by the inhibitors present. The sodium citrate, bile salts and brilliant green inhibit the growth of Gram-positive microorganisms and some non-pathogenic enteric bacteria. Lactose is present as a fermentable carbohydrate to differentiate lactose-fermenting from non-lactose-fermenting microorganisms. Neutral red is included as a pH indicator. When the medium becomes acid due to the fermentation of the lactose, the bile salts precipitate and the colonies take on the colour of the indicator. Sodium thiosulphate is added as a hydrogen sulfide source and ferric citrate as an indicator for hydrogen sulfide production. Some species of *Proteus* and *Salmonella* produce colonies with a black centre. This is due to the precipitation of iron sulphide, caused by the production of hydrogen sulphide from the sodium thiosulphate. The medium is highly selective and the R-strains of *Shigella* will not grow on the medium. For the isolation of *Shigella* the recommended plating media are Hektoen Enteric Agar and XLD Agar.

TECHNIQUE

In the isolation of *Salmonella* from faeces, it is recommend to use a combination of selective and differential media, with the aim of increasing the recovery of these microorganisms, especially if they are present in small numbers.
Inoculate the medium with the selective enrichment culture in Selenite Broth or directly and heavily with the specimen. Spread the inoculum in order to obtain well isolated colonies. Incubate for 18-24 hours at 37°C.
Lay a drop of MUCAP Test (cat. N° 191500) on the colonies in order to screen the *Salmonella* positive cultures.

USER QUALITY ASSURANCE (37°C-24HRS)

Productivity control
S.typhimurium ATCC 14028*: growth, colonies colourless with black centres
S.flexneri ATCC 12022*: growth, colourless colonies
Selectivity control
E.coli ATCC 25922*: poor growth, pink to rose-red colonies with precipitate
E.faecalis ATCC 29212*: inhibited
*NCCLS M22-A2 recommended strains.

STORAGE

Store at 2-8° - When stored as directed the medium remains stable until the expiry date shown on the label. Do not use beyond stated expiry date.
User prepared plates: 7 days at 2-8°C

REFERENCES

• Isenberg, H.D., Kominos, S. & Siegel, M. (1969). Appl. Micriobiol. **18**, 656-659.
• NCCLS document M22-A2, 1996. Quality Assurance for Commercially prepared Microbiological Culture Media-2nd ed.; Approved Standard.
• Rahaman, M.N., Hug, I. & Pajan Dey, C. (1975) J. Inf, Dis., **131**, 700-703.

PACKAGING

5120752 SS Agar 6 x 100ml ready to use flasks