TM 1816 - SALMONELLA AGAR , ONOZ

INTENDED USE

For selective isolation and identification of Salmonellae from clinical samples.

PRODUCT SUMMARY AND EXPLANATION

Salmonella and *Shigella* are gram-negative, facultatively anaerobic, non-sporulating rods in the family *Enterobacteriaceae*. They are widely distributed in animals. Salmonella Agar öNöZ was developed by öNöZ for rapid detection of *Salmonella* and *Shigella* species from clinical specimens.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	6.800
Yeast extract	3.000
Meat extract	6.000
Lactose	11.500
Sucrose	13.000
Bile salts mixture	3.825
Trisodium citrate, 5H2O	9.300
Sodium thiosulphate, 5H2O	4.250
L-Phenylalanine	5.000
Disodium phosphate, 2H2O	1.000
Ferric citrate	0.500
Magnesium sulphate	0.400
Brilliant green	0.00166
Neutral red	0.022
Aniline blue	0.250
Metachrome yellow	0.470
Agar	15.000

PRINCIPLE

Peptic digest of animal tissue, yeast extract and meat extract provide nitrogenous compounds, vitamin B complex and other essential growth nutrients. Lactose and sucrose are the fermentable carbohydrates. Bile salts mixture, brilliant green and sodium citrate inhibit gram-positive organisms. Sodium thiosulphate and ferric citrate enable the detection of hydrogen sulphide production indicated by colonies with black centers. Lactose and sucrose fermenting members of Enterobacteriaceae are partially inhibited, and their colonies can be differentiated by means of the colour produced in the presence of the indicators-neutral red and aniline blue. Proteus species deaminate phenylalanine to give phenylpyruvate, which forms a dark brown complex with iron ions. Phenylalanine also neutralizes chloramphenicol, which aids in the detection of Salmonellae from patients under treatment.

INSTRUCTION FOR USE

- Dissolve 80.40 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely, do not autoclave.
- Mix well before pouring into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Beige to light brown homogeneous free flowing powder.
Appearance of prepared medium : Greenish brown coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 7.1±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the colony	Colour change of medium	Incubation Temperature	Incubation Period
Enterobacter aerogenes	13048	50-100	Good-luxuriant	>=50%	Bluish or yellowish	Yellow	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Good	40-50%	Blue with bile precipitation	Blue	35-37°C	18-24 Hours
Klebsiella pneumoniae	13883	50-100	Poor-fair	10-30%	Bluish-purple, may have slight precipitation ring around colony	Bluish green	35-37°C	18-24 Hours
Proteus mirabilis	25933	50-100	Good-luxuriant	>=50%	Dark brown to black	Dark yellow	35-37°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Good-luxuriant	>=50%	Yellow to brown	Yellow	35-37°C	18-24 Hours
Salmonella Typhi	6539	50-100	Good-luxuriant	>=50%	Yellow with or without black centers	Yellow	35-37°C	18-24 Hours
Salmonella Typhimurium	14028	50-100	Good-luxuriant	>=50%	Yellow with black centers	Yellow	35-37°C	18-24 Hours
Shigella flexneri	12022	50-100	Good-luxuriant	>=50%	Yellow to brown	Dark brown	35-37°C	18-24 Hours

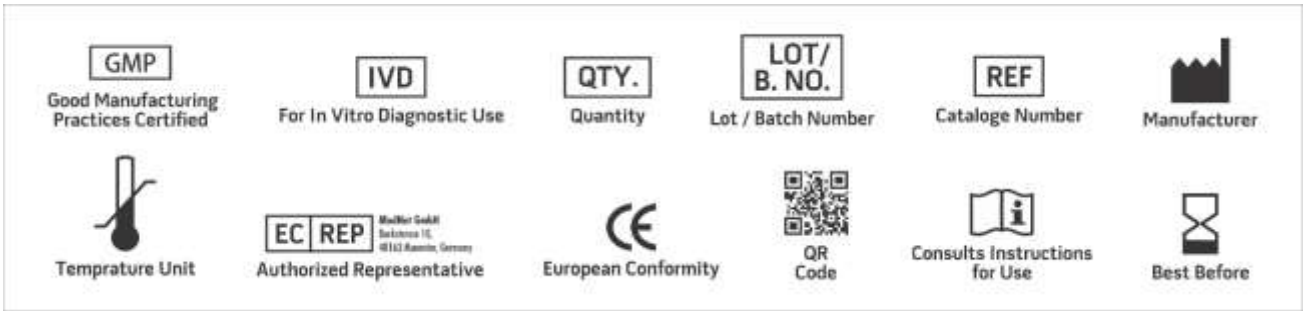
Staphylococcs aureus	25923	>=10^3	Inhibited	0%	-	-	35-37°C	18-24 Hours

PACKAGING:
In pack size of 500 gm bottles.

STORAGE
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 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
1. öNöZ E., Hoffmann K., 1978, Zbl. Bakt. Hyg., I. Abt. Orig., A240:16.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**
Revision: 08 Nov., 2019