

TM 2057 – DRIGALSKI SELECTIVE AGAR

INTENDED USE

For the selective isolation of Enterobacteria from urine stool and other clinical samples on the basis of their ability to ferment lactose.

PRODUCT SUMMARY AND EXPLANATION

Drigalski Selective Agar, is formulated by Ewing, based on the medium developed by Drigalski and Conrad for the detection of enteric pathogens.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	15.000
Yeast Extract	3.000
Meat Extract	3.000
Sodium deoxycholate	1.000
Sodium thiosulphate	1.000
Lactose	15.000
Crystal violet	0.005
Bromothymol blue	0.080
Agar	11.000

PRINCIPLE

The medium consists of lactose which serves as a source of carbon and fermentable carbohydrate. Peptone, yeast extract and meat extract provide nitrogenous nutrients to the organisms. Crystal violet and sodium deoxycholate inhibit the development of gram positive bacteria. Bromothymol blue is the pH indicator in the medium. Lactose fermenters produce acid and thus change the colour to yellow with yellow zones. Lactose non-fermenters develop blue colonies on the medium due to alkalization. Non lactose fermenting gram-negative (enteric) pathogens (*Salmonella*, *Shigella*, *Proteus*, *Pseudomonas*) form blue to green colonies whereas lactose fermenting coliform organisms (*E.coli*, *Klebsiella*, *Enterobacter*) form yellow colonies due to acid production and decrease in pH.

INSTRUCTION FOR USE

- Dissolve 49.09 grams 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.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : Light yellow to greenish yellow homogeneous free flowing powder, may have slight dye particles.
- Appearance of prepared medium** : Green coloured, clear to slightly opalescent gel forms in Petri plates.
- pH (at 25°C)** : 7.4 ± 0.2

INTERPRETATION



Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
<i>Klebsiella pneumoniae</i>	13883	50-100	Good-luxuriant	>=50%	Yellow, mucoid	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	50-100	Luxuriant	>=70%	Yellow	35-37°C	18-24 Hours
<i>Salmonella Typhi</i>	6539	50-100	Luxuriant	>=70%	Blue to green	35-37°C	18-24 Hours
<i>Shigella flexneri</i>	12022	50-100	Luxuriant	>=70%	Blue to green	35-37°C	18-24 Hours
<i>Pseudomonas aeruginosa</i>	27853	50-100	Good	>=50%	Blue to green	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. Ewing, 1986, Edwards and Ewing's identifications of the Enterobacteriaceae, 4th Ed. Elsevier Science Publishing CO., Inc. New York.
2. Drigalski V. and Conrad H., 1902, Z. Hyg. Infektionskr., 39:283.



 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Buckstrasse 10 48163 Muenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

***For Lab Use Only**
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