TMP 019 - SHEEP BLOOD SOYABEAN CASEIN DIGEST AGAR PLATE

INTENDED USE
For cultivation of wide variety of microorganisms and studying haemolytic reactions.

PRODUCT SUMMARY AND EXPLANATION
Sheep Blood Soyabean Casein Digest agar is suitable for the cultivation of fastidious aerobic and anaerobic bacteria, the latter of which can be grown either in deep cultures or by incubation under anaerobic conditions. The absence of carbohydrates and reducing sugars in this medium permits the demonstration of hemolytic reactions which is an important differentiating characteristic for bacteria, especially *Streptococcus* species. TSA with 5% sheep blood is also suitable for performing CAMP test. Group B Streptococci produce a protein like compound called CAMP factor which acts synergistically with beta toxin, produced by some strains of *Staphylococcus aureus*. The reaction occurs when a streak of beta-lysin producing *S. aureus* is inoculated perpendicular to a streak of group B *Streptococcus* resulting in an area of complete lysis in the shape of an arrowhead or crescent.

COMPOSITION

Ingredients	Gms / Ltr
Agar	15.000
Pancreatic digest of Casein	15.000
Papaic digest of Soybean	5.000
Sodium chloride	5.000
Sheep Blood	50.000ml

PRINCIPLE
The combination of casein and soy peptones provides nitrogen, amino acids and peptides for bacterial growth. Sodium chloride supplies essential electrolytes which maintain osmotic equilibrium. Sterile defibrinated sheep blood used to enrich the medium produces the hemolysis characteristics of different bacteria, such as Streptococci, *Listeria* spp., hemolytic *Staphylococcus* spp., *Escherichia coli* and *Pseudomonas* spp.

INSTRUCTION FOR USE
Either streak, inoculate or surface spread the test inoculum aseptically on the plate.

QUALITY CONTROL SPECIFICATIONS

Appearance	:	Red colour, opaque gel
Quantity of Medium	:	25ml of medium in 90mm plates.
pH (at 25°C)	:	7.3 ± 0.2
Sterility Check	:	Passes release criteria

INTERPRETATION
Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Haemolysis	Incubation Temperature	Incubation Period
Staphylococcus aureus	25923	50-100	Luxuriant	>=70%	Beta	30-35°C	18-24 hours

Staphylococcus aureus	6538P	50-100	Luxuriant	>=70%	Beta	30-35°C	18-24 hours
Streptococcus pneumoniae	6305	50-100	Luxuriant	>=70%	Alpha	30-35°C	18-24 hours
Escherichia coli	25922	50-100	Luxuriant	>=70%	None	30-35°C	18-24 hours
Pseudomonas aeruginosa	9027	50-100	Luxuriant	>=70%	None	30-35°C	18-24 hours
Pseudomonas aeruginosa	27853	50-100	Luxuriant	>=70%	None	30-35°C	18-24 hours
Bacillus subtilis	6633	50-100	Luxuriant	>=70%	None	30-35°C	18-24 hours
Salmonella typhimurium	14028	50-100	Luxuriant	>=70%	None	30-35°C	18-24 hours
Klebsiella pneumoniae	13813	50-100	Luxuriant	>=70%	None	30-35°C	18-24 hours
Enterococcus faecalis	33186	50-100	Luxuriant	>=70%	Beta	30-35°C	18-24 hours
Micrococcus luteus	9341	50-100	Luxuriant	>=70%	None	30-35°C	18-24 hours
Candida albicans	10231	50-100	Luxuriant	>=70%	None	30-35°C	<= 5 days
**Aspergillus brasiliensis*	16404	10-100	Good	50-70%	None	30-35°C	<= 5 days

*Formerly known as *Aspergillus niger*

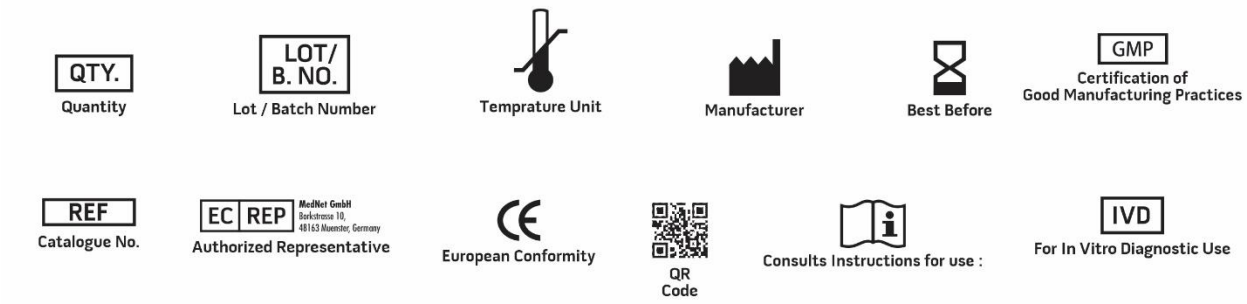
PACKAGING:
Doubled layered packing containing 5 No. of plates with one silica gel desiccant bag packed inside it.

STORAGE
On receipt, store the plates at 2-8 °C. Avoid freezing and overheating. Do not open until ready to use. Prepared plates stored in their original sleeve wrapping until just prior to use may be inoculated up to the expiration date and incubated for recommended incubation times. Allow the medium to warm to room temperature before inoculation.
Product Deterioration: Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

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

REFERENCES

1. The United States Pharmacopoeia. 2009. Amended Chapters 61, 62 & 111, The United States Pharmacopoeial Convention Inc., Rockville, MD.
2. Directorate for the Quality of Medicines of the Council of Europe (EDQM). 2009. The European Pharmacopoeia, Amended Chapters 2.6.12, 2.6.13, 5.1.4, Council of Europe, 67075 Strasbourg Cedex, France.
3. Japanese Pharmacopoeia. 2008. Society of Japanese Pharmacopoeia. Amended Chapters 35.1, 35.2, The Minister of Health, Labor, and Welfare.
4. Indian Pharmacopoeia. 2010. Govt. of India, Ministry of Health and Family Welfare, New Delhi, India.



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

***For Lab Use Only**

Revision: 22nd March. 2019