CM 20296 – BRILLIANT GREEN AGAR BASE W/ PHOSPHATES

INTENDED USE

For selective isolation & cultivation of Salmonellae by inhibiting E.coli, Proteus and Pseudomonas species.

PRODUCT SUMMARY AND EXPLANATION

Salmonella species cause manytypesof infections, from mild self-limiting gastroenteritis to life threatening typhoid fever. The most common form of Salmonella disease is self-limiting gastroenteritis with fever lasting less than 2 days and diarrhoea lasting less than 7 days. Brilliant Green Agar Base w/phosphates is formulated as per the recommendation of Rijks Institute Voorde Volksgezondheld (National Institute for Public Health), Utrecht. It is also recommended by the ISO Committee, because of its improved performance with respect to recovery of smaller numbers of Salmonella species, inhibition of Escherichia coli, Proteus species and Pseudomonas species.
The medium can further be supplemented with sulphacetamide (1g/l) and sodium mandelate (0.25g/l) to inhibit contaminating microorganisms when the sample is suspected to contain large number of competing organisms along with Salmonella species.
Brilliant Green Agar w/Phosphates being highly selective is recommended to be used along with a less inhibitory medium to improve the chances of recovery. Often cultures are enriched in Selenite Cystine Broth or Tetrathionate Broth. These enriched cultures are then isolated simultaneously on Brilliant Green Agar Base, SS Agar, Bismuth Sulphite Agar and MacConkey Agar.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	10.000
Beef extract	5.000
Yeast extract	3.000
Lactose	10.000
Sucrose	10.000
Disodium hydrogen phosphate	1.000
Sodium dihydrogen phosphate	0.600
Phenol red	0.090
Brilliant green	0.0047
Agar	12.000

PRINCIPLE

Themedium contains peptone, beef extract and yeast extract as sources of carbon, nitrogen, vitamins, amino acids and essential nutrients. The two sugars namely lactose and sucrose serve as energy sources. Fermentation of lactose and / or sucrose in the medium results in the formation of acidic pH which is detected by phenol red indicator. Phosphates buffer the medium. Brilliant green helps to inhibit the contaminating microflora.

INSTRUCTIONFOR USE

Dissolve 25.84grams in 500 ml purified / distilled water.
Heat with occasional agitation and bring just to the boil to dissolve the medium completely. DO NOT AUTOCLAVE.
For more selectivity and maximum recovery aseptically add the rehydrated contents of 1 vial of Sulpha Supplement.
Mix well before pouring into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light yellow to pink homogeneous free flowing powder.
Appearance of prepared medium : Greenish brown coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 6.9±0.2

INTERPRETATION

Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Escherichia coli	25922	>=10^4	Inhibited	0%	-	35-37°C	18-24 Hours
Proteus vulgaris	13315	50-100	None-poor	0-10%	Red	35-37°C	18-24 Hours
Pseudomonas aeruginosa	10145	50-100	None-poor	0-10%	Red	35-37°C	18-24 Hours
Salmonella Enteritidis	13076	50-100	Luxuriant	>=70%	Bright red	35-37°C	18-24 Hours
Salmonella Typhimurium	14028	50-100	Luxuriant	>=70%	Bright red	35-37°C	18-24 Hours

PACKAGING:

Inpacksizeof500 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

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

REFERENCES

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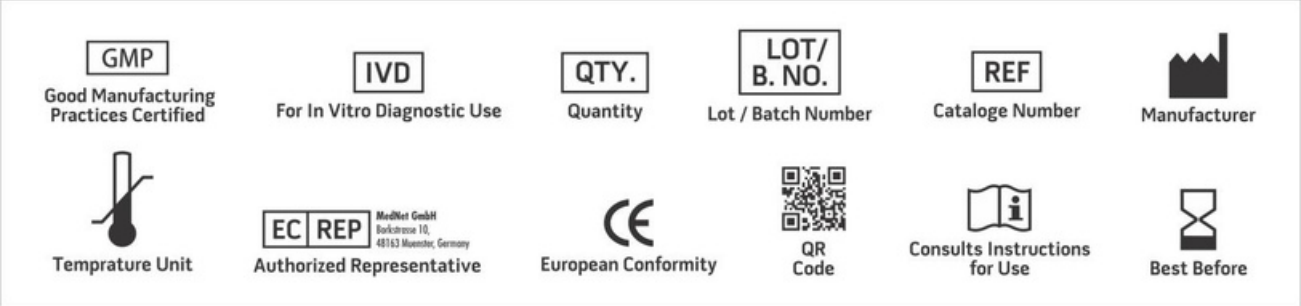

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For LabUse Only