

## CM 23971 - LACTOS (Mono) sterile Gamma Irradiated (Culture Media Ingredient)

### INTENDED USE

Used in media for tissue culture and therefore production of vaccines of viral origin including foot and mouth disease, polio, dengue, coxsackie B3 and many other viruses. Other uses include growth of lactobacilli, spore growth of clostridia and in fermentation procedures for hormone production.

### PRODUCT SUMMARY AND EXPLANATION

Lactos (Mono) Sterile Gamma Irradiated, an animal origin peptone, is the enzymatically hydrolyzed protein portion of milk whey. This supplement is a mixture of peptides, amino acids, and carbohydrates, both simple and complex. LACTOS (Mono) sterile Gamma Irradiated TBL to support the growth of many mammalian, bacterial, and insect cell types, and it has been used to produce both recombinant proteins and animal health vaccines. It is also used as this supplement as an amino acid supplement for mammalian cell culture media.

### PRINCIPLE

Lactos (Mono) Sterile Gamma Irradiated contains high levels of essential amino acids. It is recommended for applications requiring a highly soluble source of amino acids and peptides. It is especially useful in fermentations, laboratory media and in tissue culture or suitable for vaccine production.

### INSTRUCTION FOR USE

Lactos (Mono) Sterile Gamma Irradiated TBL has been used as a nutritional source for lactobacilli. It is also useful for indole testing because of its high tryptophan content. Lactalbumin is frequently used in mammalian cell culture media as an amino acid supplement.

### QUALITY CONTROL SPECIFICATIONS

Appearance	:	White crystalline powder, Odorless smell.
Solubility (2% soln. at 25°C)	:	Freely soluble in water.
Clarity (2% Soln. at 121°C.)	:	Clear solution.
pH (0.5M in H <sub>2</sub> O, 25°C)	:	4.0 – 6.0
Chloride (Cl)	:	NMT – 0.005%
Sulphate (SO <sub>4</sub> )	:	NMT – 0.005%
Total Ash	:	NMT – 0.05%
Heavy Metal (Pb)	:	NMT-0.0005%
Iron (Fe)	:	NMT-0.0005%
Assay	:	NLT – 99.5%
Microbial Test	:	Passes

### INTERPRETATION

Cultural characteristic observed in 2% Lactose (mono), Sterile (gamma irradiated) (Triple Pack) and 1.5% agar after incubation at 35-37°C for 18-24 hours.

Microorganism	ATCC	Growth	Acid	Gas
Citrobacter freundii	8090	luxuriant	positive reaction (yellow coloured)	positive reaction
Enterobacter aerogenes	13048	luxuriant	positive reaction (yellow coloured)	positive reaction
Escherichia coli	8739	luxuriant	positive reaction (yellow coloured)	positive reaction



Klebsiella pneumoniae	13883	luxuriant	positive reaction (yellow coloured)	positive reaction
Proteus vulgaris	13315	luxuriant	negative reaction, no colour change	negative reaction
Serratia marcescens	8100	luxuriant	negative reaction, no colour change	negative reaction
Salmonella Typhi	6539	luxuriant	negative reaction, no colour change	negative reaction
Salmonella phimurium	14028	luxuriant	negative reaction, no colour change	negative reaction
Shigella flexneri	12022	luxuriant	negative reaction, no colour change	negative reaction
Pseudomonas aeruginosa	9027	luxuriant	negative reaction, no colour change	negative reaction
Staphylococcus aureus	6538	luxuriant	negative reaction, no colour change	negative reaction
Bacillus subtilis	6633	luxuriant	negative reaction, no colour change	negative reaction
Candida albicans	10231	luxuriant	negative reaction, no colour change	negative reaction
Aspergillus brasiliensis	16404	luxuriant	negative reaction, no colour change	negative reaction
Clostridium sporogenes	11437	luxuriant	negative reaction, no colour change	negative reaction

#### PACKAGING

Standard packing is 500gm in plastic bottle. After packing tightly closed in a dry and well-ventilated place.

#### STORAGE

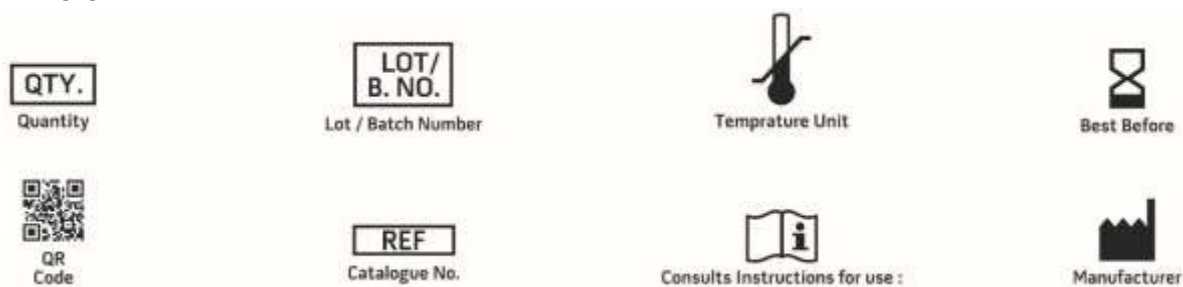
Store at room temperature in cool place, Keep plastic bottle tightly closed in a dry and well-ventilated place. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use.

Product Deterioration: Do not use product if any contamination, discoloration or other sign of deterioration is found.

#### DISPOSAL

After use, contact a licenced professional waste disposal service to dispose off this material. Dispose of as unused product.

#### REFERENCES: NA



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

\*ForLab Use Only

