vitrocell
meios para cultivo celular

DULBECCO MEM MEDIUM

DEFINITION: It is a mixture of salts, amino acids, vitamins and other components that are essential for cellular growth.

ACTION: Acts like a nutritive solution in cell culture.

PRODUCT SPECIFICATIONS: It is applied for human and other animal cell culture (diploid, etc.). There are two presentations: powder and liquid. The powder medium is stable for more than 24 months if well locked in freezer, promoting constant results at long term. DULBECCO MEM has been shown to support cellular growth from fetal lung cells, kidneys cells and lineage cells.

ADVANTAGES: Tested in at least three different cellular lineages and also in lymphocyte culture. Ph and osmolality are always determined. Each lot is only discharged if within proper limits, and the medium also promotes a great cellular growth.

PHYSICAL-CHEMICAL CHARACTERISTICS:

-Appearance: rosy and homogeneous powder
-Particles size: approximately 20 microns
-Solubility: clear solution at final concentration (1X)
-pH at 25°C (without NaHCO3): 6.3 + 0.5
-pH at 25°C (with NaHCO3): 7.7 + 0.5
-Osmolality (without NaHCO3): 234 + 5%
-Osmolality (with NaHCO3): 310 + 5

STORAGE: Store the powder or the final solution at 2 to 6°C. If these conditions are not maintained alterations may be observed, such as:

1. Change colour
2. Grainings
3. Insolubility
4. Alteration of pH
5. Incapacity to maintain its integrity under normal conditions.

PREPARATION: DULBECCO MEM medium is extremely hygroscopic and must not be exposure to the environment. Preparations with higher concentrations are not recommended due to the possibility of precipitate formation.

1. Measure out tridistillate water to approximately 90% of desired total volume of medium (15-20°C).
2. Add the powder and mix gently into equilibrium. DO NOT HEAT THE WATER.
3. After the powder is completely dissolved, add 3.7 g of sodium bicarbonate 5.6% for one liter.
4. Add antibiotics or other components if desired.
5. If necessary, adjust pH with HCl 1N or NaOH 0.1N, or also CO2.
6. Add tridistillate water to the final volume and filter the medium into sterile container using a 0.22m membrane filter.

PRESENTATION: Powder: bottles with powder for 1, 10 and 50 liters.
Liquid: Bottle with 100 and 500 ml.
STORAGE: 2 to 6°C
SHELF LIFE: 12 months

COMPONENTS OF DULBECCO MEM (DMEM)

NORGANIC SALTS	mg/L		
		L-serine	**42,00**

CaCl2H2O	265,00	L-threonine	95,00
Fe(NO3)3.9H2O	0,10	L-thryptophan	16,00
KCL	400,00	L-tyrosine	104,20
MgSO4.7H2O	200,00	L-valine	94,00
NaCL	6.400,00		
NaH2PO4H2O	125,00	VITAMINS	mg/L
NaHCO3	3.700,00	Choline Chloride	4,00
		D-Pantothenic Acid	4,00
AMINO ACIDS	mg/L	Folic acid	4,00
L-arginine.HCL	84,00	Inositol	7,20
L-cystine	62,57	Nicotinamide	4,00
L-glutamine	584,00	Pyridoxine.HCL	4,00
Glycina	30,00	Riboflavin	0,40
L-histidine.HCL.H2O	42,00	Thiamine.HCL	4,00
L-isoleucine	105,00		
L-leucine	105,00	OTHER COMPONENTS	mg/L
L-lysine.HCL	146,00	Glucose	1.000,00
L-methionine	30,00	Pyruvic Acid	110,00
L-phenylanine	66,00	Phenol red	15,00

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