

## DMEM/Ham's F-12 Medium

**MED-209** DMEM / Ham's F-12 without L-Glutamine 500 ml  
**MED-210** DMEM / Ham's F-12 with L-Glutamine 500 ml

- basic media for producing many serum-free media
- supports media which are used for the production of human proteins, segregated into the supernatant
- supports the growth of most cell lines
- suitable for pancreas cells and sertoli cells

1:1 mixture of a nutrient enriched Ham's F12 Medium and a vitamin enriched DMEM Medium

CO<sub>2</sub>-Concentration, optimum 5.5%

Osmolality: 280 – 340 mOsmol/kg

Sterility: tested

Shelf Life: without L-Glutamine 12 months  
with L-Glutamine 9 months

pH: 7.0 – 7.5

Endotoxin: < 1 EU/ml

Storage: + 2 °C – + 8 °C

### Formulation in mg/ml

#### Inorganic Salts

Calcium Chloride anhydrous	116.60
Ferric(III)-Nitrate . 9H <sub>2</sub> O	0.05
Ferric(II)-Sulphate . 7H <sub>2</sub> O	0.417
Potassium Chloride.	311.80
Cupric(II)-sulphate . 5H <sub>2</sub> O	0.0013
Magnesium Chloride . 6H <sub>2</sub> O	61.00
Magnesium Sulphate anhydrous	48.84
Sodium Chloride	6999.50
Sodium Dihydrogen Phosphate . H <sub>2</sub> O	62.50
di-Sodium Dihydrogen Phosphate anhydrous	71.02
Zinc Sulphate . 7H <sub>2</sub> O	0.432
Sodium Bicarbonate	2450.00

#### Vitamins

D-(+)-Biotin	0.0035
D-Calcium Pantothenate	2.24
Choline Chloride	8.98
Folic Acid	2.65
myo-Inositol	12.60
Nicotinamide	2.02
Pyridoxal . HCl	2.00
Pyridoxine . HCl	0.031
Riboflavin	0.219
Thiamine . HCl	2.17
Thymidine	0.365
Vitamin B <sub>12</sub>	0.68

#### Amino Acids

L-Alanine	4.45
L-Arginine . HCl	147.50
L-Asparagine . HCl	7.50
L-Aspartic Acid	6.65
L-Cysteine . HCl . H <sub>2</sub> O	17.56
L-Cysteine	24.00
L-Glutamic Acid	7.35
Glycine	18.75
L-Histidine . HCl . H <sub>2</sub> O	31.48
L-Isoleucine	54.47
L-Leucine	59.05
L-Lysine . HCl	91.25
L-Methionine	17.24
L-Phenylalanine	35.48
L-Proline	17.25
L-Serine	26.25
L-Threonine	53.45
L-Tryptophan	9.02
L-Tyrosine	38.70
L-Valine	52.85

#### Other Components

D-Glucose anhydrous	3151.00
Hypoxanthine	2.10
DL-68-Lipoic Acid	0.105
Linoleic Acid	0.042
Phenol Red	8.10
Putrescine . 2HCl	0.081
Sodium Pyruvate	55.00
L-Glutamine in <b>MED-210</b>	365.00

#### Literature:

Dulbecco, R. and Freeman, G. (1959). Plaque Production by the Polyoma Virus. Virology. 8, 396-397

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