

**Product Name**

 Name: DMEM/F12 1:1 mixture, with L-Glutamine, Sodium Pyruvate, HEPES, **SLE Grade**

Cat. No.: C3131-0500

Size: 500 mL

**Product Description**

Dulbecco's Modified Eagle Medium/Nutrient Mixture F12 Ham (DMEM/F-12, 1:1 mixture) with L-Glutamine and HEPES was originally formulated for rat neuroblastoma cells and MDCK cells. The mixture is extremely nutritious and supports the growth of a wide variety of cells including certain epithelial, endothelial, and granulosa cells.

Dulbecco's Modified Eagle Medium/Nutrient Mixture F12 Ham (DMEM/F-12, 1:1 mixture) with L-Glutamine and HEPES is produced to reach the **super-low endotoxin (SLE) grade**, with the endotoxin level  $\leq 0.01$  EU/mL as measured by the Limulus amoebocyte lysate (LAL) method. The production process and quality management system meet the requirements of cGMP and have passed the ISO 13485 certification.

It does not contain trace elements. Users are advised to review the literature for recommendations regarding medium supplementation and suitable cell lines.

**Composition**

Ingredients	mg/L	Ingredients	mg/L
<b>INORGANIC SALTS</b>			
Calcium chloride dihydrate	154.500	Magnesium sulphate anhydrous	48.840
Copper sulphate pentahydrate	0.001	Potassium chloride	311.800
Disodium hydrogen phosphate anhydrous	71.020	Sodium chloride	6996.000
Ferric nitrate nonahydrate	0.050	Sodium dihydrogen phosphate anhydrous	54.300
Ferrous sulphate heptahydrate	0.417	Zinc sulphate heptahydrate	0.432
Magnesium chloride hexahydrate	61.200		
<b>AMINO ACIDS</b>			
Glycine	18.750	L-Leucine	59.050
L-Alanine	4.450	L-Lysine hydrochloride	91.250
L-Arginine hydrochloride	147.500	L-Methionine	17.240
L-Asparagine monohydrate	7.500	L-Phenylalanine	35.480
L-Aspartic acid	6.650	L-Proline	17.250
L-Cysteine dihydrochloride	17.560	L-Serine	26.250
L-Cystine hydrochloride monohydrate	31.290	L-Threonine	53.450
L-Glutamic acid	7.350	L-Tryptophan	9.020

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L-Glutamine	365.000	L-Tyrosine disodium salt	48.100
L-Histidine hydrochloride monohydrate	31.480	L-Valine	52.850
L-Isoleucine	54.470		
<b>Vitamins</b>			
Choline chloride	8.980	Pyridoxine hydrochloride	0.031
D-Biotin	0.004	Riboflavin	0.219
D-Pantothenic acid	2.240	Thiamine hydrochloride	2.170
Folic acid	2.660	Vitamin B12	0.680
Niacinamide	2.020	Myo-Inositol	12.600
Pyridoxal hydrochloride	2.000		
<b>OTHERS</b>			
D-Glucose	3151.000	Phenol red sodium salt	8.630
DL-Thioctic acid	0.105	Putrescine hydrochloride	0.081
HEPES buffer	3574.500	Sodium pyruvate	110.000
Hypoxanthine	2.400	Thymidine	0.365
Linoleic acid	0.042	Sodium bicarbonate	1200.000

### Storage and Stability

The product should be kept at **2 - 8°C**.

The product is **light-sensitive** and therefore should not be left in the light.

Shelf life: 12 months from date of manufacture.

### Procedure

1. Take a bottle from the defined storage conditions at 2 - 8°C and read the label.
2. Wipe the outside of the bottle with a disinfectant solution such as 70% ethanol.
3. Pipette the appropriate volume of the product using an aseptic/sterile technique under a laminar-flow culture hood.
4. Add antibiotics or other nutrients if desired.

### Quality Control

Dulbecco's Modified Eagle Medium/Nutrient Mixture F12 Ham (DMEM/F-12, 1:1 mixture) with L-Glutamine and HEPES is tested for sterility, pH, osmolality, and endotoxin concentration. In addition, each batch is tested for cell growth performance.

### Precaution and Disclaimer

For research use only, not for clinical diagnosis, and treatment.