

Product Name

Name: DMEM/F12 1:1 mixture, with L-Alanyl-L-Glutamine and Sodium Pyruvate , with HEPES 15mM

Cat. No.: C3137-0500

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 culture medium has been supplemented L-Alanyl-L-Glutamine in place of L-Glutamine.

Compared with Glutamine, L-Alanyl-L-Glutamine is much more stable than L-Glutamine, releases less ammonia in culture, and improves cell viability and growth.

The mixture is extremely nutritious and supports the growth of a wide variety of cells including certain epithelial, endothelial, and granulosa cells.

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

Composition

Ingredients	mg/L
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INORGANIC SALTS

Calcium chloride dihydrate	154.500
Copper sulphate pentahydrate	0.001
Disodium hydrogen phosphate anhydrous	71.020
Ferric nitrate nonahydrate	0.050
Ferrous sulphate heptahydrate	0.417
Magnesium chloride	61.200

hexahydrate

Magnesium sulphate anhydrous	48.840
Potassium chloride	311.800
Sodium chloride	6996.000
Sodium dihydrogen phosphate anhydrous	54.300
Zinc sulphate heptahydrate	0.432

AMINO ACIDS

Glycine	18.750
L-Alanine	4.450
L-Arginine hydrochloride	147.500
L-Asparagine monohydrate	7.500
L-Aspartic acid	6.650
L-Cysteine dihydrochloride	17.560
L-Cystine hydrochloride monohydrate	31.290
L-Glutamic acid	7.350
L-Alanyl-L-Glutamine	542.390
L-Histidine hydrochloride monohydrate	31.480
L-Isoleucine	54.470
L-Leucine	59.050
L-Lysine hydrochloride	91.250
L-Methionine	17.240



L-Phenylalanine	35.480
L-Proline	17.250
L-Serine	26.250
L-Threonine	53.450
L-Tryptophan	9.020
L-Tyrosine disodium salt	48.100
L-Valine	52.850

Vitamins

Choline chloride	8.980
D-Biotin	0.004
D-Pantothenic acid	2.240
Folic acid	2.660
Niacinamide	2.020
Pyridoxal hydrochloride	2.000
Pyridoxine hydrochloride	0.031
Riboflavin	0.219
Thiamine hydrochloride	2.170
Vitamin B12	0.680
myo-Inositol	12.600

OTHERS

D-Glucose	3151.000
DL-Thioctic acid	0.105
HEPES buffer	3574.500
Hypoxanthine	2.400
Linoleic acid	0.042
Phenol red sodium salt	8.630
Putrescine hydrochloride	0.081
Sodium pyruvate	110.000

Thymidine	0.365
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-Alanyl-L-Glutamine and Sodium Pyruvate, with HEPES is tested for sterility, pH, osmolality, and endotoxin concentration. In addition, each batch is tested for cell growth performance.

Manufacturer

Shanghai XP Biomed Ltd.

Issue Date

March 2nd 2026

Precaution and Disclaimer

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

