

## Product Name

Name: Nutrient Mixture Ham's F-12, with L-Glutamine

Cat. No.: C3134-0500

Size: 500 mL

## Product Description

Ham's Nutrient Mixtures were originally developed for single-cell plating of near diploid Chinese hamster ovary (CHO) cells and mouse L-cells. Both F-10 and F-12 are formulated for use with or without serum, depending on the type of cells being cultured.

Nutrient Mixture Ham's F-12 was originally designed for the serial propagation and cloning of the two CHO cell lines, CHD-3 and CHL-1, and mouse L cells. It is the medium of choice for the growth of the cells of rodent origin and for the cloning of myeloma and hybridoma cells. This medium is also the medium of choice for clonal toxicity assay using CHO cells.

Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific to different cell lines.

## Composition

Ingredients	mg/L	Ingredients	mg/L
<b>INORGANIC SALTS</b>			
Calcium chloride dihydrate	44.100	Sodium chloride	7599.000
Copper sulphate pentahydrate	0.003	Sodium bicarbonate	1176.000
Ferric sulphate heptahydrate	0.834	sodium phosphate dibasic anhydrous	142.040
Magnesium chloride anhydrous	57.650	Zinc sulphate tetrahydrate	0.863
Potassium chloride	223.600		
<b>AMINO ACIDS</b>			
Glycine	7.500	L-Leucine	13.100
L-Alanine	8.910	L-Lysine hydrochloride	36.500
L-Arginine hydrochloride	210.700	L-Methionine	4.480
L-Asparagine anhydrous	15.010	L-Phenylalanine	4.960
L-Aspartic acid	13.300	L-Proline	34.500
L-Cysteine hydrochloride	35.120	L-Serine	10.500
L-Glutamic acid	14.700	L-Threonine	11.900
L-Glutamine	146.000	L-Tryptophan	2.040
L-Histidine hydrochloride monohydrate	20.960	L-Tyrosine disodium salt	7.810
L-Isoleucine	3.940	L-Valine	11.700

## Vitamins



Biotin	0.007	Pyridoxine hydrochloride	0.062
Choline chloride	13.960	Riboflavin	0.038
D-Ca-Pantothenate	0.480	Thiamine hydrochloride	0.340
Folic acid	1.320	Vitamin B12	1.360
Nicotinamide	0.037	i-Inositol	18.000
<b>OTHERS</b>			
D-Glucose	1801.600	Phenol red sodium salt	1.240
Hypoxanthine sodium salt	4.770	Putrescine dihydrochloride	0.161
Linoleic acid	0.084	Sodium pyruvate	110.100
Lipoic acid	0.210	Thymidine	0.730

## 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

Nutrient Mixture F-12 Ham, with L-Glutamine is tested for sterility, pH, osmolality, and endotoxin concentration. In addition, each batch is tested for cell growth performance.

## Manufacturer

Shanghai Dr. Cell Co., Ltd.

## Issue Date

June 2023

## Precaution and Disclaimer

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

