

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 |
|---------------------------------------|---------|------------------------------------|----------|
| INORGANIC SALTS | | | |
| 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 | | |
| AMINO ACIDS | | | |
| 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 |

OTHERS

| | | | |
|--------------------------|----------|----------------------------|---------|
| 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.

Precaution and Disclaimer

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