Ham's F12K Medium, w: 2.0 mM L-Glutamine, w: 2.0 mM Sodium pyruvate, w: 2.5 g/L NaHCO3

820608a

Introducing Ham's F-12K (Kaighn's) Medium, a specialized modification of Ham's F-12 medium designed to meet the unique requirements of biological research. This advanced medium offers distinct advantages, enhancing the cultivation of primary human hepatocytes, as well as rat and chicken liver cells, particularly in reduced serum conditions.

Ham's F-12K (Kaighn's) Medium is carefully formulated to optimize cell culture conditions. It features an enriched composition, providing elevated levels of essential components such as amino acids and sodium pyruvate, as well as additional elements including putrescine, thymidine, hypoxanthine, and zinc. These additions enable researchers to supplement the medium with minimal serum or defined components for specific cell types, facilitating precise experimental conditions.

Notably, Ham's F-12K (Kaighn's) Medium does not contain proteins or growth factors. Consequently, supplementation with growth factors and Fetal Bovine Serum (FBS) is often necessary, allowing researchers to tailor the medium to the requirements of their specific cell lines. For optimal performance, the concentration of FBS must be carefully optimized for each cell line, ensuring optimal growth and functionality.

To maintain physiological pH, Ham's F-12K (Kaighn's) Medium employs a sodium bicarbonate buffer system (2.5 g/L), necessitating a controlled 5-10% CO_2 environment during cultivation. This ensures the medium's pH remains within the ideal range for cell growth and viability.

Quality control

pH = 7.2 +/- 0.02 at 20-25°C.

Each lot has been tested for sterility and absence of mycoplasma and bacteria.

Maintenance

Keep refrigerated at +2°C to +8°C in the dark. Freezing as well as warming up to +37°C minimize the quality of the product.

Do not heat the medium to more than 37°C or use uncontrollable sources of heat (e.g., microwave appliances).

If only a part of the medium is to be used, remove this amount from the bottle and warm it up at room temperature.

Shelf life for any medium but the basic medium is 8 weeks from the date of manufacture.

Composition

Components

mg/L

Inorganic Salts

Calcium chloride x $2H_2O$

135,24

Copper(II) sulfate x $5H_2O$

0,00

Iron (II) sulfate x $7H_2O$

0,83

Magnesium chloride x $6H_2O$

105,72

Magnesium sulfate x $7H_2O$

394,49

Potassium chloride

283,29

Potassium dihydrogen phosphate

58,52

Sodium chloride

7597,20

di-Sodium hydrogen phosphate

anhydrous

115,02

Zinc sulfate x $7H_2O$

0,14

Other Components

D(+)-Glucose anhydrous

1260,00

Hypoxanthine

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CEO / Geschäftsführer: Jonathan Steubing

Banking information
Sparkasse Heidelberg
IBAN: DE35 6725 0020 0009 2076 86
BIC: SOLADES1HDB

4,08
DL-α-Lipoic acid
0,21
Phenol red
3,00
Putrescine x 2HCl
0,32
Sodium pyruvate
220,00
NaHCO3
2500,00
Thymidine
0,73
Amino Acids
L-Alanine
17,82
L-Arginine x HCl
421,40
L-Asparagine x H2O
30,02
L-Aspartic acid
26,62
L-Cysteine x HCl x H2O
70,24
L-Glutamine
292,20
L-Glutamic acid
29,42
Glycine
15,01
L-Histidine x HCl x H2O
41,92
L-Isoleucine
7,87
L-Leucine
26,24
L-Lysine x HCl
73,04
L-Methionine
8,95
L-Phenylalanine
9,91
L-Proline
69,06
L-Serine
21,02
L-Threonine
23,82
L-Tryptophan
4,08
L-Tyrosine
10,87
L-Valine
23,42
Vitamins
D(+)-Biotin
0,07
D-Calcium pantothenate
0,48
Choline chloride

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13,96
Folic acid
1,32
myo-Inositol
18,02
Nicotinamide
0,04
Pyridoxine x HCl
0,06
Riboflavin
0,04
Thiamine x HCl
0,34
Vitamin B12
1,36

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