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## Ham's F-12K Medium

Cat #: BMC1014

Size: 500 mL

[ <u>;</u> ]	Ham's F-12K Medium		
REF	Cat #: BMC1014	LOT	Lot #: Refer to product label
	Applicable cells: Mammalian cells		
Ĵ.	Storage: Stored at 4°C for 12 months		

# **Assay Principle**

Ham's F-12K nutrient medium is a Kaighn's improved version of Ham's F-12 nutrient mixture, which is based on Ham's F-10 medium and increases the concentration of choline, inositol, humutine and several amino acids. Ham's F-12K improves the concentration of amino acids and pyruvate on the basis of Ham's F-12, reduces the amount of glucose, and modifies the composition and content of salts (Konigsbergs). Ham's F-12K medium was originally designed to culture primary human hepatocytes as well as differentiated rat and chicken cells, and is suitable for single-cell inoculation of CHO cells in serum-free conditions, as well as for some other types of mammalian cells, such as chondrocytes and rat prostate epithelial cells, with the addition of serum. Ham's F-12K Medium contains amino acids, vitamins, inorganic salts and other components required for multi-type cell culture, but does not contain proteins, lipids or any growth factors, so the product should be used with serum or without serum additives. This product is filtered with 0.22 µm filter membrane to remove bacteria, without high temperature and high pressure sterilization, less nutrient loss, ready to open the bottle; To provide a variety of component combinations of cell media to meet various needs; Suitable for a variety of mammalian cell culture.

## **Component Description**

Concentration	1×		
pH	7.2-7.4		
L-Glutamine	2 mM		
NaHCO <sub>3</sub>	2,500 mg/L		
D-Glucose	1,260 mg/L		
Sodium Pyruvate	2 mM		
HEPES Buffer	None		
Phenol Red Indicator	3 mg/L		

## **Materials Required but Not Supplied**

• Microscope, incubator (37°C, 5%CO<sub>2</sub>), fetal bovine serum (FBS), trypsin solution



- Centrifuge
- · Culture bottle, precision pipettes, disposable pipette tips

### **Reagent Preparation**

**Preparation of complete medium:** 10 mL fetal bovine serum (FBS) was added to 90 mL Ham's F-12K Medium, mixed well, and double antibody could be added as required.

### **Assay Procedure**

1. Adherent cells: Passage when the cell density reaches 80-90%

(1) The culture supernatant was discarded and the cells were cleaned with PBS 1-2 times.

(2) Add appropriate amount of trypsin solution, make the trypsin solution cover the whole cell culture bottle, cover it well and put it into the incubator  $(37^{\circ}C, 5\% CO_2)$  for digestion.

(3) The cells were observed under the microscope, and the cells contracted obviously, and the morphological changes of the cells were found at the bottom of the culture vessel by naked eye; Or when you blow the cells with a gun and find that the cells can just be blown down, add an appropriate amount of complete medium and blow down the cells to terminate digestion.

#### Note: Different cells have different digestion times.

(4) The cell suspension was centrifuged at 1,000 rpm for 5 min and the supernatant was discarded.

(5) Resuspend the cells with fresh complete medium, add them to a new culture bottle, and add sufficient complete medium.

#### Note: The passage ratio is different for different cells.

(6) Put the cells back into the incubator (37°C, 5%CO<sub>2</sub>) for further culture.

2. Suspension cells: Passage when the cell density reaches 80-90%

(1) All cell cultures were collected, centrifuged at 1,000 rpm for 5 min, and the supernatant was discarded.

(2) Resuspend the cells with fresh complete medium, add them to a new culture bottle, and add sufficient complete medium.

#### Note: The passage ratio is different for different cells.

(3) Put the cells back into the incubator (37°C, 5%CO<sub>2</sub>) for further culture.

### **Precautions**

1. Store the product in the refrigerator at 4°C as soon as possible after receiving it, avoid long-term storage at room temperature. In order to maintain the best use effect of the product, do not freeze or thaw treatment.

2. Use caution. When re-storing the bottle after opening, you need to seal the bottle with a sealing film to avoid contamination.

3. Some contents such as L-glutamine are easy to degrade, so do not store for too long and use as soon as possible.

### **Disclaimer**

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.

