



## MEM, With NEAA

Cat #: BMC1012

Size: 500 mL

	<b>MEM, With NEAA</b>		
<b>REF</b>	Cat #: BMC1012	<b>LOT</b>	Lot #: Refer to product label
	<b>Applicable cells:</b> Mammalian cells		
	<b>Storage:</b> Stored at 4°C for 12 months		

## Assay Principle

MEM (Minimum Essential Medium), also known as the minimum essential medium, minimum essential medium or low limit Eagle medium, developed by Harry Eagle on the basis of the Eagle Basic Medium (BEM), is the most basic and most applicable medium. It is one of the most commonly used media for animal cell culture. MEM contains only 12 essential amino acids, glutamine and 8 vitamins, the composition is simple, mainly used for the culture of adherent cells, the formula can also be used for other types of cell culture after modification.

MEM, With NEAA, which is based on MEM with the addition of L-alanine, L-glutamic acid, L-asparagine, L-aspartate, L-proline, L-serine and glycine 7 kinds of NEAA, can reduce the side effects of cell production of non-essential amino acids during cell culture and effectively promote cell proliferation and metabolism. MEM, With NEAA 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; It is suitable for a variety of mammalian cell cultures, including HeLa, BHK-21, 293, HEP-2, HT-1080, MCF-7, fibroblasts and primary rat astrocytes.

## Component Description

Concentration	1×
pH	7.2-7.4
NEAA	Contain
L-Glutamine	2 mM
NaHCO <sub>3</sub>	2,200 mg/L
D-Glucose	1,000 mg/L
Sodium Pyruvate	None
HEPES Buffer	None
Phenol Red Indicator	10 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 MEM, With NEAA, 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°C, 5%CO<sub>2</sub>) 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.