

Cell Stimulation Kit (With protein transport inhibitor)

CAT NO: IK-CEA-1

Storage: -20°C, 6 months.

Size: 4*100μL

Production

In the cell, the activation of PKC can cause the phosphorylation of many protein kinases downstream, forming a cascade reaction, resulting in the expression of a variety of proteins, and then lead to cell activation. PKC can be activated by DAG and Ca²⁺. PMA is an effective activator of PKC. Ionomycin is a potent, selective calcium ionophores. PMA is often used in combination with Ionomycin to stimulate immune cell activation and induce cytokine production in cell cultures in vitro. At the same time, protein transport inhibitors can also be added to inhibit the exocrine of cytokines to accurately analyze the expression level of cytokines.

Treatment with PMA and Ionomycin is sufficient to induce activation of many cell types to produce cytokines. Brefeldin A and Monensin result in the accumulation of secreted proteins in the endoplasmic reticulum and Golgi apparatus. Thus, the Kit can be used for induction and subsequent intracellular detection of cytokines and other secreted proteins in both in vitro-cultured and ex vivo cells.

Kit Components

Reagent	Size	Solvent
Reagent 1 1000×PMA(81μM)	100μL	DMSO
Reagent 2 1000× Ionomycin(1.34mM)	100μL	DMSO
Reagent 3 1000× Brefeldin A(10.6mM)	100μL	DMSO
Reagent 4 1000×Monensin(2mM)	100μL	EtOH

Product Characteristics

1. This Kit consists of 4 independent components with clear concentration, which can be freely combined or accurately adjusted according to your experimental requirements.
2. Flexible customization. Customers can customize their own Kit by removing or adding other required compounds according to their own experimental needs. Custom specifications and packaging are also available.

Related Literature

[1]. Deng S, et al. ITPRIPL1 binds CD3ε to impede T cell activation and enable tumor immune evasion. Cell. 2024 Apr 25;187(9):2305-2323.e33. doi: 10.1016/j.cell.2024.03.019. Epub 2024 Apr 12. (IF: 64.5)

Note

1. Before use, please centrifuge each tube of small dose reagent instantaneously to avoid loss.
2. This product is for scientific research only. Do not use for medicine, clinical diagnosis or treatment, food and cosmetics.
3. For your safety and health, please wear a laboratory coat, disposable gloves and a mask.

Related Products

IKM2000 500×Cell Stimulation Cocktail MIX (With protein transport inhibitor)