



ADCC Assay Kit

Cat. No.: CB-P001-K

This product is for research use only and is not intended for diagnostic use.

Overview

Description

Cell-mediated cytotoxicity is an important phenomenon characterized by the immune system causing damaged cells to be lysed in the body. The activation of the immune system results in the removal of target cells infected by pathogens or transformed cells/cancer cells. This process is mediated by antibody-dependent cell-mediated cytotoxicity (ADCC), complement-mediated cytotoxicity, or lymphocyte-mediated cytotoxicity. Our cell-mediated cytotoxicity analysis kit contains carboxyfluorosuccinimide ester (CFSE) (a green fluorescent probe for labeling live target cells) and 7-aminoactinomycin D (7-AAD), a red fluorescent probe that marks late apoptotic and necrotic target cells killed in cancer cells. The assay does not require cell lysis, and can directly measure cytotoxicity rather than indirect indicators such as ATP release or lactate dehydrogenase activity. The method based on flow cytometry can provide reliable data and support multi-parameter analysis.

Applications

Measuring cytotoxicity in response to drug or toxin treatment
 Quantification of the cytotoxic effects of immune effector cells on target cells
 Evaluation of physiological mediators and antibodies that affect cell cytotoxicity

Specification

Size	100 assays
Detection Method	Fluorescence (FL1 channel and FL3 channel)
Sample	Cells etc
Species Reactivity	All species

Components	Cytotoxicity Assay Buffer 7-AAD Staining Solution CFSE Staining Solution
Shipping	Gel Pack
Storage	-20°C
Shelf Life	12 months
Research Use	For Research Use Only! Not For Use in Humans.

Images

Figure: Cytotoxicity assay kit: Jurkat cells (105 cells/ml) are grown in RPMI medium supplemented with 10% FBS. Treat the cells with camptothecin (5 μ M) overnight. The next day, the cells were stained with CFSE and 7-AAD for 30 minutes. At 37°C. The figure (right) shows the cytotoxic effect of the compound and illustrates the apoptosis of cells using CFSE and 7-AAD.

