

CFDA, SE Proliferation & Detection Assay kit

CFDA, SE Proliferation Assay is based on CFDA, SE fluorescein dye for cell tracing and proliferation detection. CFDA & SE are fluorescein dye with membrane permeability and does not have fluorescence luminescence. When it penetrates the cell membrane and enters living cells, it can be catalyzed by the esterase in the cytoplasm to produce carboxyfluoresceinsuccinimidyl ester (CFSE), which can emit strong green fluorescence and cannot penetrate the cell membrane. It remains intact in the cell. CFSE can also spontaneously and irreversibly bind to intracellular amino groups to be coupled to cell proteins. At the same time, excess and uncoupled CFDA, SE will passively diffuse back into the extracellular medium and be removed by subsequent washing steps. . The fluorescence of non-dividing cells labeled by CFDA and SE is stable, and the stable labeling time can reach several months, so it is suitable for cell community analysis. The fluorescence of CFDA and SE-labeled cells is uniform. During cell division and proliferation, CFSE-labeled fluorescence can be evenly distributed to the two progeny cells, and the fluorescence intensity becomes half of that of the parent cell.

CFDA and SE are most commonly used to detect the proliferation of lymphocytes, and can also be used to detect the proliferation of other cells such as fibroblasts, natural killer cells, and hematopoietic progenitor cells. CFDA, SE labeled cells show green fluorescence, Ex=494nm, Em=521nm, FL1 detection channel can be used for flow cytometry detection. CFDA, SE labeled cells can also be observed with a fluorescence microscope. 488nm excitation wavelength can be used for detection.

CFDA, SE labeling of cells usually takes 10-15 minutes. For different cells, you need to find the best labeling time by yourself. Calculated based on the fluorescent probe labeling volume of each sample being 1mL.

Catalog No.	520020
Size	1000 Assays
Product Category	Cell Detection

Kit Components	1. CFDA, SE Fluorescent Probe 2. CFDA, SE Solution 3. 10x Cell Staining Buffer
Storage/Stability	-20°C/1 year
Shipping	Gel Packs

www.realgenelabs.com

For Research Use only