

CFDA SE assay kit

CFDA SE Cell Proliferation and Cell Tracking Kit

CATALOG #
AAA332616

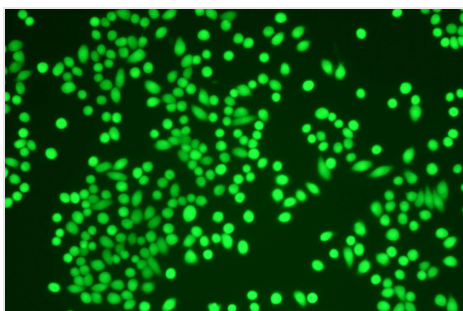
PRODUCT SYNONYMS

CFDA SE; CFDA SE Cell Proliferation and Cell Tracking Kit; CFDA; CFDA SE assay kit

PRODUCT SPECIFICATIONS

Samples	Cells
Usage Notes	Thaw all the components at room temperature before opening
Preparation and Storage	Stored at -20 degree C for 12 months, protected from light

IMAGES



Application Data

CFDA SE Cell Proliferation and Cell Tracking Kit

ADDITIONAL INFORMATION

Related Product Information for CFDA SE assay kit	Principle of the Assay: 5(6)-CFDA, SE is a cell tracer dye that can be used for fluorescent labeling of living cells, not only for in vitro experiments on cell proliferation, but also for tracking the process of cell division and proliferation in vivo. 5(6)-CFDA, SE is a derivative of fluorescein diacetate (FDA) and has cell membrane permeability without fluorescein luminescence itself. After penetrating the cell membrane through passive transportation and entering living cells, 5(6)-CFDA, SE is catalysed by esterases in the cytoplasm to generate carboxyfluorescein succinimide ester (CFSE), which can generate strong green fluorescence and cannot penetrate the cell membrane, and can be well retained in the cell. CFSE can also spontaneously and irreversibly bind to intracellular amino acids to couple to cellular proteins. At the same time, excessive and uncoupled 5(6)-CFDA is passively diffused back into the extracellular medium and cleared by subsequent washing steps. The fluorescence of non-dividing cells labeled with 5(6)-CFDA, SE is very stable and stable for several months, so it is very suitable for cell community analysis. The fluorescence of 5(6)-CFDA, SE labeled cells is very uniform, which is better than other previously used cell tracer fluorescence probes such as PKH26, and the fluorescence distribution of the daughter cells after division is also very uniform. During the process of cell division and proliferation, CFSE labeled fluorescence can be evenly distributed between the two offspring cells, and the fluorescence intensity becomes half of that of the parent cells. According to the different fluorescence intensities, undivided cells can be detected by flow cytometry (FL1 channel). Cells that divide once (1/2 fluorescence intensity), twice (1/4 fluorescence intensity), three times (1/8 fluorescence intensity), and more times of division can be detected. 5(6)-CFDA, SE can detect cell division times up to eight or more times. Cells labeled with 5(6)-CFDA, SE can be used in vitro and in vivo proliferation studies without staining adjacent cells. 5 (6) - CFDA, SE are most commonly used for the detection of lymphocyte proliferation, as well as for the detection of proliferation of fibroblasts, NK cells, hematopoietic progenitor cells, and other cells. 5 (6) - CFDA, SE labeled cells exhibit green fluorescence. In addition to flow cytometry for cell proliferation detection, fluorescence microplate reader can also be used to quantify the number of living cells, or fluorescence microscopy can be used for uniform staining of cell tracing observation.
Product Categories/Family for CFDA SE assay kit	Cytology; Cellular states

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/assay-kits/cfda-se/332616>