

## Calcein-AM/PI Dual Staining Assay kit

The working principle of this kit lies in the dual dyes of Calcein-AM and PI to perform double staining and labeling of live and dead cells at the same time. To perform analysis at the level of live and dead cells; Calcein-AM is a cell staining reagent for fluorescent labeling of living cells, which emits green fluorescence (Ex=490nm, Em=515nm) whereas propidium iodide (PI) to perform double fluorescent staining of live and dead cells. Propidium iodide (PI) cannot pass through the cell membrane of living cells, but can only pass through the disordered area of the dead cell membrane to reach the nucleus, and is embedded in the cell's DNA double helix to produce red fluorescence (Ex=535 nm, Em= 617 nm), so PI only stains dead cells.

Since both Calcein and PI-DNA can be excited by 490 nm, a fluorescence microscope can be used to observe live and dead cells at the same time. With 545 nm excitation, only dead cells can be observed.

According to our optimized experimental system, 200uL cell suspension can be stained in a single time, and 500 detections can be done.

Catalog No.	520009
Size	500 Assays
Product Category	Cell Detection
Kit Components	1. Calcein-AM Solution (2mM) 2. PI Solution (1.5mM) 3. 10x Assay Buffer
Storage/Stability	-20°C/1 year
Shipping	Gel Packs