

## Calcein-AM/EthD-III Staining Assay kit

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Calcein AM, EthD-III method Viability/Cytotoxicity Assay Kit for Live & Dead Cells provides dual fluorescence staining for the detection of living and dead cells. The two probes in the kit effect cell viability by measuring intracellular esterase activity and plasma membrane integrity. This kit can be used for fluorescence microscopes, flow cytometers, microplate readers and other fluorescence detection systems.

Calcein-AM is only used for cell viability testing and short-term labeling of live cells due to the lack of esterase in dead cells. Ethidium bromide dimer 3 (Ethidium Homodimer III; EthD-III) is a high-affinity fluorescent nucleic acid dye, which is a substitute for EthD-I. It has similar spectral characteristics and autofluorescence. It is very weak, and once combined with DNA, the fluorescence will be significantly enhanced, creating bright red fluorescence (the maximum excitation/emission wavelength is about 530/620nm). The fluorescence intensity of EthD-III after binding to DNA is 45% higher than that of EthD-1. EthD-III is a membrane-impermeable probe that selectively stains dead cells with disrupted membranes.

Catalog No.	520104
Size	500 Assays
Product Category	Cell Detection
Kit Components	1. Calcein-AM Solution (4mM) 2. EthD-III Solution (2.5mM) 3. PBS (0.01M; PH=7.2-7.4)
Storage/Stability	-20°C/1 year
Shipping	Gel Packs