Calcein AM (ultra pure)

Calcium dye

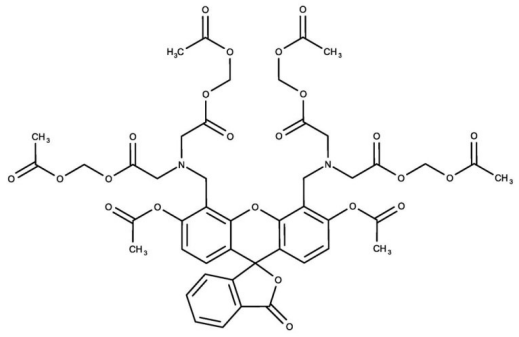
Calcein acetomethoxy (AM), a derivative of calcein, is useful for differentiating between live and dead cells. Calcein AM readily passes through the cellular plasma membrane. Once inside, esterases cleave the AM groups yielding the more hydrophilic calcein, trapped inside the cell. The loss of the acetomethoxy group also enables calcein to readily bind intracellular calcium; resulting in a strong yellowish-green fluorescence. As dead cells lack cytoplasmic esterases, fluorescence is demonstrated exclusively in live cells, making the probe useful for determining cell viability. Calcein-AM exhibits low cytotoxicity and does not significantly affect cellular functions such as proliferation or chemotaxis. Viability assays using calcein correlate well with other assays, such as ^{51}Cr-release.
Wavelength Maxima: Excitation 495nm, Emission 515nm

Citations: 7 View Online »

Ordering Information Order Online »

ENZ-52002	1mg

Manuals, SDS & CofA View Online »



Handling & Storage

Use/Stability	Stable for at least one year after receipt when stored as recommended.
Handling	Protect from light. Keep cool and dry.
Long Term Storage	-20°C
Shipping	Ambient Temperature

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	3\',6\'-Di(O-acetyl-2\',7\'-bis[N,N-bis(carboxymethyl)-aminomethyl]fluorescein tetraacetoxymethyl ester
CAS	148504-34-1
Formula	$C_{46}H_{46}N_2O_{23}$
MW	994.9
Purity	≥95% (HPLC)
Solubility	Soluble in DMSO.
Technical Info / Product Notes	This product is a member of the CELLESTIAL® product line, reagents and assay kits comprising fluorescent molecular probes that have been extensively benchmarked for live cell analysis applications. CELLESTIAL® reagents and kits are optimal for use in demanding imaging applications, such as confocal microscopy, flow cytometry and HCS, where consistency and reproducibility are required.

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