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Calcein AM, green fluorescent cell viability probe

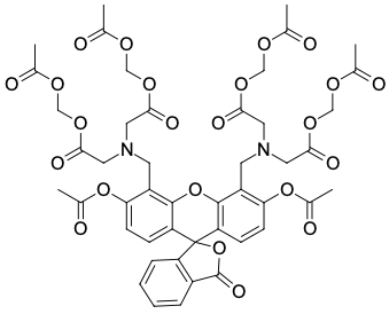
http://www.lumiprobe.com/p/calcein-am

Calcein AM is a cell-permeant green fluorogenic dye used to assess the viability of live cells.

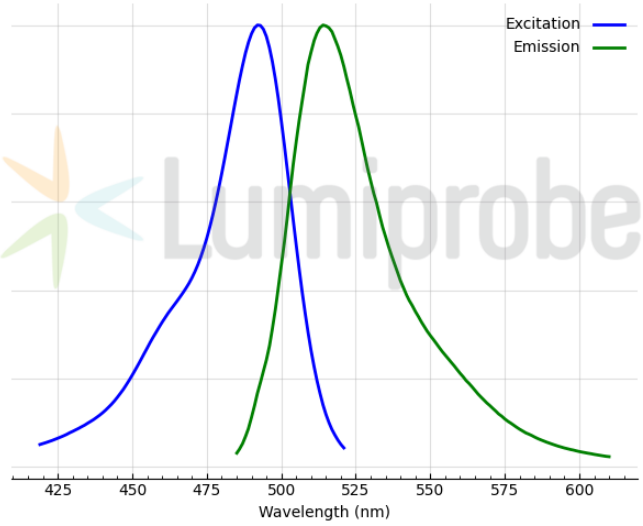
The neutral, hydrophobic Calcein AM easily crosses the cell membrane of living cells. Inside the cell, intracellular esterases cleave the acetoxymethyl (AM) group, releasing the Calcein molecule, which is a membrane-impermeant and highly fluorescent form. The intensity of the Calcein fluorescence is proportional to the number of living cells and the activity of the esterases within them.

Calcein AM is used in microscopy and flow cytometry to indicate cell health. It is also a sensitive indicator for intracellular calcium changes, cytotoxicity, and multidrug resistance.

Calcein AM staining is not compatible with cell fixation and permeabilization.



Structure of Calcein AM



Excitation and emission spectra of free Calcein

General properties

Appearance:	yellow solid
Molecular weight:	994.86
CAS number:	148504-34-1
Molecular formula:	$C_{46}H_{46}N_2O_{23}$
Solubility:	DMSO, DMF, ethanol
Quality control:	NMR ^1H and HPLC-MS (95+%)
Storage conditions:	24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

Spectral properties

Excitation/absorption maximum, nm:	492
Emission maximum, nm:	514