

Fluo-4 AM



Membrane Permeable, Green Fluorescent Calcium Indicator. Most popular solution for intracellular Ca^{2+} flux in high-throughput screening and fluorescence microscopy. Resistant to intracellular pH changes with a K_d tuned for best performance in most applications.

Available in these sizes:

1041C	500 μg x 1
1041F	50 μg x 10
1041G	50 μg x 3

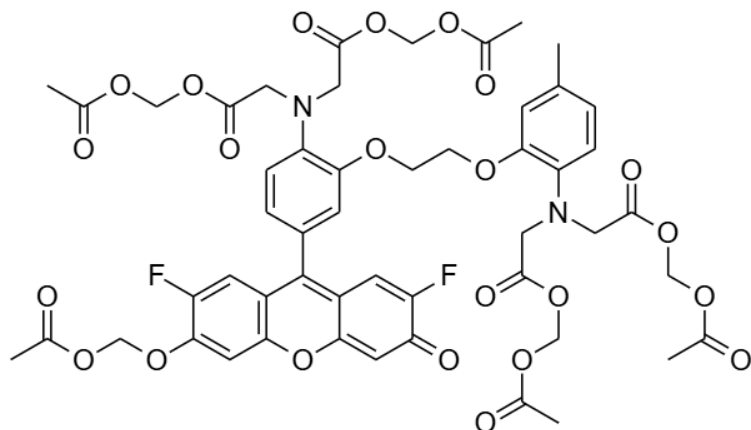
Description	
CAS number	273221-67-3
PubChem CID	4060965
Molecular Weight	1096 g/mol
Solubility	DMSO
K_d	355 nM
Storage	-20°C
Appearance	Red to light orange film or pellet
Container	1.5 mL polypropylene cryogenic vial

Absorbance Spectrum	Agilent Cary 60 UV-VIS Spectrophotometer
Solvent*	High Calcium (Ca^{2+}) Buffer Solution
Absorbance max	494 $\pm$ 3 nm

Fluorescence Spectrum	Horiba Jobin Yvon FluoroMax Plus Spectrofluorometer
Solvent*	High Calcium (Ca^{2+}) Buffer Solution
Excitation max	494 $\pm$ 3 nm
Emission max	516 $\pm$ 3 nm

*Note: AM Esters are hydrolyzed to the ion sensing form

Also check out our [Brilliant Calcium Assay Kit \(Cat# 10000\)](#) which contains Fluo-4 AM and all the reagents needed to perform calcium flux assays in a convenient all-in-one kit. Available in sizes with enough materials for 2, 10, and 100 plates.



LCMS	Agilent 1220 Infinity II
Column	Phenomenex 00D-4251-E0 Luna C ₁₈ , 4.6 x 100 mm, 100Å, 3 μm
UV-Vis Diode Array Detector	254 nm
Purity	$\geq 95\%$
Single Quad MS Detector	ESI positive
Molecular Ion	1097.3 $\pm$ 0.5 m/z [$\text{M}+\text{H}$] ⁺ 594.1 $\pm$ 0.5 m/z [$\text{M}+2\text{H}$] ²⁺

¹ H NMR Spectrum	Bruker Avance 400
Solvent	CDCl_3
Spectra	Product conforms to structure

Cell Assay	Molecular Devices FlexStation 3 Multi-Mode Microplate Reader & BioTek Cytation 5 Cell Imaging
F/F ₀ post stimulus in relevant biological assay	To Pass Test
Imaging Analysis	Observed fluorescence is intracellular with minimal extracellular fluorescence