

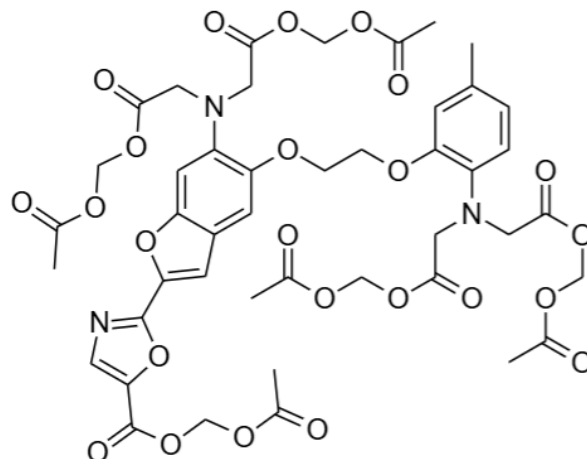
Fura-2 AM



Membrane Permeable, UV-excitable, Ratiometric Green Fluorescent Calcium Indicator. Most popular ratiometric indicator for intracellular Ca^{2+} flux. Can be excited at ~ 340 nm to detect Ca^{2+} -bound Fura-2 and at ~ 365 nm to detect Ca^{2+} -free Fura-2.

Available in these sizes:

1051B	1 mg x 1
1051E	50 μg x 20



Description	
CAS number	108964-32-5
PubChem CID	3364574
Molecular Weight	1001 g/mol
Solubility	DMSO
K_d	145 nM
Storage	-20°C
Appearance	Yellow to yellowish green 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 Low Calcium (Ca^{2+}) Buffer Solution
Absorbance max	340 ± 3 nm (High Ca^{2+}) 365 ± 3 nm (Low Ca^{2+})

Fluorescence Spectrum	Horiba Jobin Yvon FluoroMax Plus Spectrofluorometer
Solvent*	High Calcium (Ca^{2+}) Buffer Solution Low Calcium (Ca^{2+}) Buffer Solution
Excitation max	340 ± 3 nm (High Ca^{2+}) 365 ± 3 nm (Low Ca^{2+})
Emission max	500 ± 3 nm (High Ca^{2+}) 510 ± 3 nm (Low Ca^{2+})

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

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	1002.3 ± 0.5 m/z $[\text{M}+\text{H}]^+$

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 Multi-mode Reader
F_{Ratio}/F_0 Ratio post stimulus in relevant biological	To Pass Test
Imaging Analysis	Observed fluorescence is intracellular with minimal extracellular fluorescence

Also check out our [ION Essentials Ratiometric Calcium Kit \(Cat# 6000\)](#) which contains Fura-2 AM and other reagents needed to perform no wash ratiometric calcium flux assays. Available in sizes with enough materials for 2 or 10 plates.