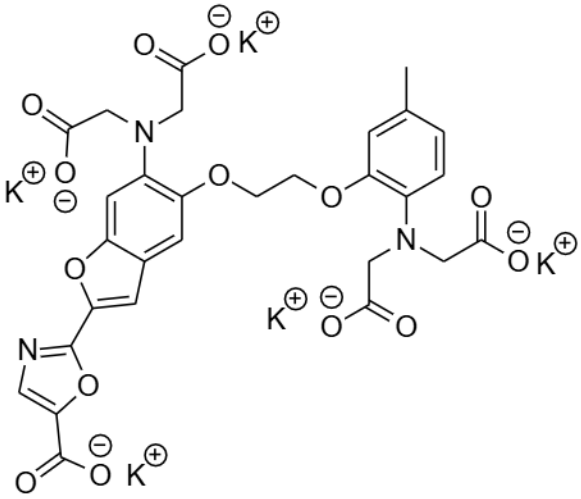
Product Specifications

Fura-2 K^+ Salt



Membrane Impermeable form of Fura-2, one of the most popular Ratiometric Green Fluorescent Calcium Indicators. Can be used in lipid membrane-free systems, liposomes, or introduced into cells via electroporation, microinjection, or other methods

Available in these sizes:	
1052B	1 mg x 1
1052E	50 µg x 20

Description	
CAS number	113694-64-7
PubChem CID	6098363
Molecular Weight	832 g/mol
Solubility	Water
K_d	145 nM
Storage	-20°C
Appearance	Yellow to yellow-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	335 ± 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	337 ± 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+})

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	≥ 90%
Single Quad MS Detector	ESI positive
Molecular Ion*	642.3 ± 0.5 m/z $[M+H]^+$ 321.6 ± 0.5 m/z $[M+2H]^{2+}$ *Fura-2 K^+ Salt is protonated to the acid form in the mobile phase and detected in ESI Positive Mode

^1H NMR Spectrum	Bruker Avance 400
Solvent	CD_3OD
Spectra	Product conforms to structure

In Vitro Assay	BioTek Cytation 5 Cell Imaging Multi-mode Reader
$F_{Bound}/F_{Control}$ in relevant biological buffer	To Pass Test