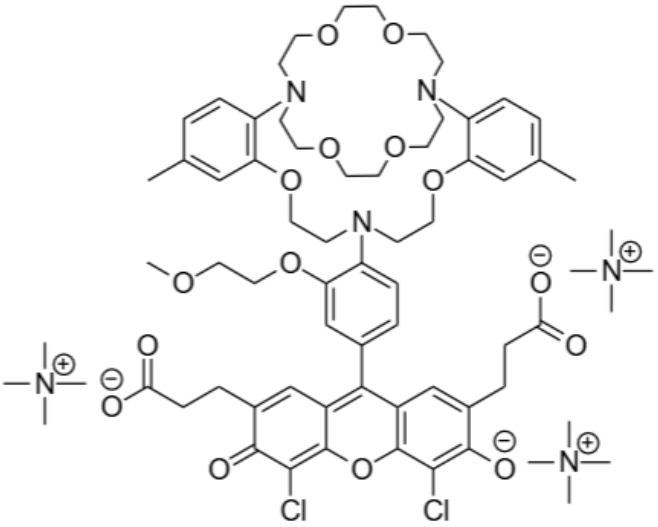
ION BIOSCIENCES

Advion Interchim scientific

Product Specifications

IPG-4 TMA$^+$ Salt



Membrane Impermeable, Yellow-Green Fluorescent Potassium Indicator. Higher affinity for potassium than both IPG-1 and IPG-2, with improved selectivity for potassium over sodium. Can be used in lipid membrane-free systems, liposomes, or introduced into cells by electroporation, microinjection or other methods.

Available in these sizes:	
3023C	500 µg x 1
3023F	50 µg x 10

Description	
CAS Number	N/A
PubChem CID	163342038
Molecular Weight	1337 g/mol
Solubility	Water
K_d	7 mM
Storage	-20°C
Appearance	Red film or pellet
Container	1.5 mL polypropylene cryogenic vial

Absorbance Spectrum	Agilent Cary 60 UV-VIS Spectrophotometer
Solvent*	High Potassium (K^+) Buffer Solution
Absorbance max	520 ± 3 nm

Fluorescence Spectrum	Horiba Jobin Yvon FluoroMax Plus Spectrofluorometer
Solvent*	High Potassium (K^+) Buffer Solution
Excitation max	517 ± 3 nm
Emission max	541 ± 3 nm

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*	1116.4 ± 0.5 m/z $[M+H]^+$ 558.7 ± 0.5 m/z $[M+2H]^{2+}$ *IPG-4 TMA$^+$ Salt is protonated to the acid form in the mobile phase and detected in ESI Positive Mode

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

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