ION BIOSCIENCES

Certificate of Analysis

Fura-2 LR K^+ Salt

Lot 10615a

Method	Specification	Analysis
LCMS	**Agilent 1220 Infinity II**	
Purity*	≥ 90%	92.2%
Molecular Ion (Acid Form)	*Common Peaks* 700.4 ± 0.5 m/z (MH^+) 722.1 ± 0.5 m/z (MNa^+) 350.6 ± 0.5 m/z (MH_2^{2+})	*Detected Peaks* 700.4 m/z Not Detected 350.9 m/z
Absorbance Spectrum	**Agilent Cary 60 UV-VIS Spectrophotometer**	
Longest-Wavelength Absorbance Maximum**	336 ± 3 nm	336
Fluorescence Spectrum	**Horiba Jobin Yvon FluoroMax 4 Spectrofluorometer**	
Excitation Max.; Emission Max.**	336 ± 3 nm; 499 ± 3 nm	336 nm; 499 nm
^{1}H NMR Spectrum	**Bruker Avance 400**	
Peaks and Integrations	Only relevant product peaks — with appropriate chemical shifts and peak integrations — and solvent peaks present	Confirmed
In Vitro Assay	**BioTek Cytation 5 Imaging Reader**	
F_{medium}/F_0; F_{high}/F_0 in relevant buffer solution assay	4.1 ± 0.4; ≥ 19.57	4.28; 34.26

*Column: Agilent Infinity Lab Poroshell 120 ECC18, 3.0 x 50 mm, 2.7 µm C_{18}, UV-Vis Diode Array Detector: 254 nm, Single Quad MS Detector: ESI Positive; **solvent: 10 mM CaCl, 140 mM KCl, 10 mM MOPS, 10 mM EGTA pH 7.2

Andrew Vergote 23 May 2024
Quality Manager