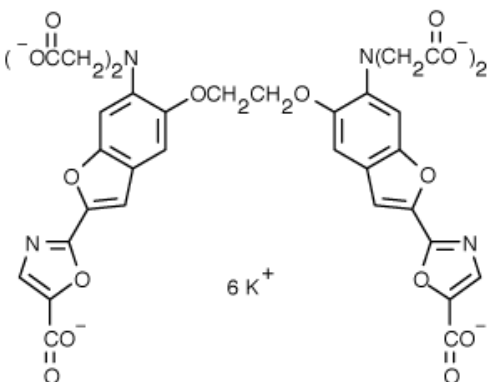


### Instruction Manual

Catalog Number	PK-CA707-50045
Description	Bis-Fura-2, hexapotassium salt is membrane-impermeant derivative of membrane-permeant, UV light-excitable calcium indicator Fura-2, AM ester. It contains two Fura-2 fluorophores. This indicator has a slightly lower affinity for Ca <sup>2+</sup> and is useful for intracellular loading by microinjection or infusion from patch pipette. For more information please see also product descriptions of PK-CA707-50030, PK-CA707-50031, PK-CA707-50032.
Quantity	1 mg
Excitation / Emission Maxima	$\lambda_{ex}/\lambda_{em} = 363/512$ nm (no Ca <sup>2+</sup> ); $\lambda_{ex}/\lambda_{em} = 335/505$ nm (high Ca <sup>2+</sup> ); Extinction Coefficient: 56,000 M <sup>-1</sup> cm <sup>-1</sup> (no Ca <sup>2+</sup> ); 68,000 M <sup>-1</sup> cm <sup>-1</sup> (high Ca <sup>2+</sup> )
Molecular Structure	
Molecular Weight / Molecular Formula	1007.14 Da; C <sub>34</sub> H <sub>20</sub> K <sub>6</sub> N <sub>4</sub> O <sub>18</sub>
Purity	>98% (as determined by TLC)
Appearance / Formulation / Solubility	Light yellow solid; soluble in water (pH>6). Aqueous solution has a shelf life of at least 3 months if stored at 4°C or below.
Storage & Stability	Store desiccated at ≤4°C. Protect from light, especially when in solution.
Applications	Fluorescent calcium indicator
References	<ol style="list-style-type: none"> <li>1) J Neurophysiol 84, 2777(2000)</li> <li>2) Brain Res 831, 113(1999)</li> <li>3) J Neurophysiol 81, 2508(1999)</li> <li>4) J Neurosci Res 57, 906(1999)</li> <li>5) J. Neurochem Int 34, 391(1999)</li> </ol>
Caution	Potentially harmful. Avoid prolonged or repeated exposure. Avoid getting in eyes, on skin, or on clothing. Wash thoroughly after handling. If eye or skin contact occurs, wash affected areas with plenty of water for 15 minutes and seek medical advice. In case of inhaling or swallowing, move individual to fresh air and seek medical advice immediately.

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