

# Indo-1 (pentapotassium salt)

1-[2-Amino-5-(6-carboxy-2-indolyl)phenoxy]-2-(2-amino-5-methylphenoxy)-ethane-N,N,N',N'-tetraacetic acid; pentapotassium salt

## Instruction Manual

Catalog Number	PK-CA707-50041
Description	Similar to Fura-2, Indo-1 is also a UV-excitabile fluorescent Ca <sup>2+</sup> sensor. However, different from Fura-2, the fluorescent emission maximum undergoes a large blue shift from 482 nm to 398 nm upon Ca <sup>2+</sup> binding. Thus, Ca <sup>2+</sup> concentration can be determined by ratioing the fluorescence intensities at the two wavelengths. As with Fura-2, this ratioing technique avoids problems associated with uneven dye distribution, cell or tissue thickness and photobleaching. Indo-1 has been widely used in flow cytometry studies. Indo-1, pentaammonium salt is membrane-impermeant but can be loaded into cells via microinjection or scrape loading.
Quantity	1 mg
Excitation / Emission Maxima	$\lambda_{ex} \backslash \lambda_{em} = 349/475$ nm (no Ca <sup>2+</sup> ); $\lambda_{ex} \backslash \lambda_{em} = 330/400$ nm (high Ca <sup>2+</sup> ); Extinction Coefficient: 33,000 M <sup>-1</sup> cm <sup>-1</sup> (no Ca <sup>2+</sup> ); 33,000 M <sup>-1</sup> cm <sup>-1</sup> (high Ca <sup>2+</sup> )
Molecular Weight / Molecular Formula	840 Da; C <sub>32</sub> H <sub>26</sub> K <sub>5</sub> N <sub>3</sub> O <sub>12</sub>
Purity	>90% (as determined by HPLC)
Appearance / Formulation / Solubility	Light yellow solid; soluble in water (pH>6) or DMSO.
Storage & Stability	Store desiccated at -20°C. Protect from light, especially when in solution.
Applications	NA
References	Babcock, D.R., et al. J. Biol. Chem. 262, 15041(1987)
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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