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Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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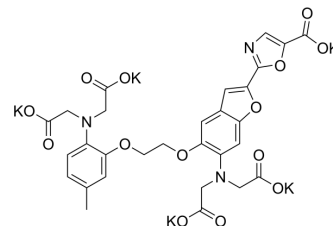
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Fura-2 pentapotassium

Cat. No.:	HY-D0110A
CAS No.:	113694-64-7
Molecular Formula:	C ₂₉ H ₂₂ K ₅ N ₃ O ₁₄
Molecular Weight:	831.99
Target:	Fluorescent Dye
Pathway:	Others
Storage:	-20°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

1M NaOH : 10 mg/mL (12.02 mM; Need ultrasonic and warming)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		1.2019 mL	6.0097 mL	12.0194 mL
	5 mM		0.2404 mL	1.2019 mL	2.4039 mL
	10 mM		0.1202 mL	0.6010 mL	1.2019 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Fura-2 pentapotassium is a scaled fluorescent dye that can be used for intracellular calcium imaging with the K_d value of 140 nM. Fura-2 pentapotassium has an emission wavelength of 510 nm and excitation wavelengths of 340 nm or 380 nm and the ratio of 340/380 fluorescence intensity is proportional to the intracellular Ca²⁺ level^{[1][2]}.

In Vitro

Fura-2 pentapotassium (10 μM, 2 min) can be used to detect changes in the concentration of calcium ions in neutrophils of heparinized peripheral blood^[1].
Fura-2 pentapotassium (10 μM, 5 min) can be used as a calcium probe to assess the distribution of calcium ions within heart mitochondria without affecting the activity of it in rat^[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Omar Rafael Alemán, et al. The Antibody Receptor Fc Gamma Receptor IIIb Induces Calcium Entry via Transient Receptor Potential Melastatin 2 in Human Neutrophils. Front Immunol. 2021 May 13;12:657393. doi: 10.3389/fimmu.2021.657393.

[2]. James G. McCormack, et al. Studies on mitochondrial Ca^{2+} -transport and matrix Ca^{2+} using fura-2-loaded rat heart mitochondria. Biochim Biophys Acta. 1989 Mar 23;973(3):420-7.

Caution: Product has not been fully validated for medical applications. For research use only.

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