2',7'-

Dichlorodihydrofluoresce diacetate

Peroxynitrite indicator

Cell permeable, sensitive indicator of peroxynitrite formation. After hydrolysis of the diacetate groups by cytosolic esterases or base-catalyzed cleavage of the diacetate groups, DCDHF is oxidized by peroxynitrite to the highly fluorescent product dichlorofluorescein (DCF). Formation of DCF can be monitored by fluorescence spectroscopy (Ex(max): 502nm, Em(max): 523nm), or by absorbance spectroscopy at 500nm (ϵ =59,500M⁻¹ cm⁻¹). Neither nitric oxide, superoxide nor hydrogen peroxide alone appear to oxidize DCDHF.

Citations: 16

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Ordering Information

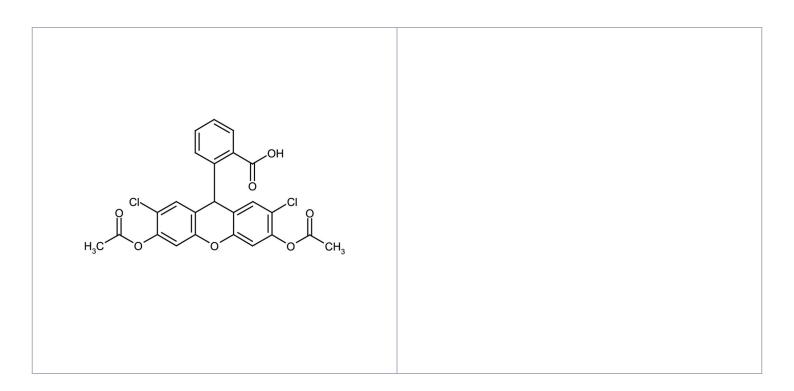
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ALX-610-022-M050

50mg

Manuals, SDS & CofA

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Handling & Storage

Use/Stability As indicated on product label or CoA when stored as recommended. Stock solution in

organic solvents is stable for at least 6 months if stored at -20°C. For maximum solubility in aqueous buffers, dissolve directly in 0.1M disodium carbonate (7.7mg/ml) and then

immediately dilute with PBS, pH 7.2, to the desired concentration.

Long Term Storage -20°C

Shipping Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name DCDHF diacetate, 2',7'-Dichlorofluorescein diacetate

Appearance White to light orange-brown solid.

CAS 4091-99-0

Formula $C_{24}H_{16}O_7CI_2$

MW 487.3

Purity ≥95% (HPLC)

Solubility Soluble in DMSO (≥25mg/ml), 100% ethanol or dimethyl

formamide; sparingly soluble in aqueous buffers.

Last modified: May 29, 2024