2′,7′-Dichlorodihydrofluorescein 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.

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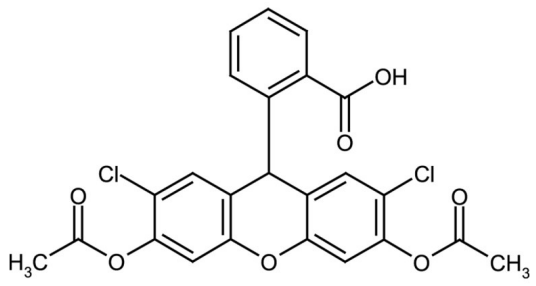
ALX-610-022-M050	50mg

Manuals, SDS & CofA View Online »


OH
O
Cl
Cl
O
O
H3C
O
O
O
CH3

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	$C_{24}H_{16}O_7Cl_2$
MW	487.3
Purity	≥95% (HPLC)
Solubility	Soluble in DMSO (≥25mg/ml), 100% ethanol or dimethyl formamide; sparingly soluble in aqueous buffers.

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