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Carboxy-H_2DCFDA [5-(and 6)-Carboxy-2•,7•-dichlorodihydrofluorescein diacetate]

Catalog Number	Packaging Size
C264	25 mg

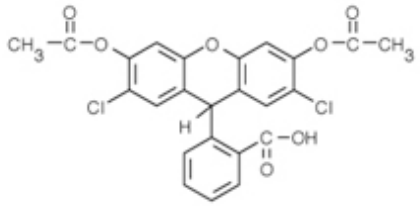
Storage upon receipt: -20°C, protected from light

Introduction

Carboxy-H_2DCFDA [5-(and 6)-Carboxy-2•,7•-dichlorodihydrofluorescein diacetate] is a chemically reduced analogue of fluorescein used as an indicator for reactive oxygen species (ROS) in cells. Upon cleavage of the acetate groups by intracellular esterases and oxidation, the nonfluorescent Carboxy-H_2DCFDA is converted to the highly fluorescent 5-(and 6)-carboxy-2',7'-dichlorofluorescein, with additional negative charges that impede its leakage out of the cell.

Specifications

Label:	2',7'-dichlorofluorescein
Ex/Em:	495/529 nm
Detection Method:	Fluorescent
Molecular Formula:	$C_{25}H_{16}Cl_2O_9$
Molecular Weight:	531.30
CAS Number:	-
Storage Conditions:	-20°C, protected from light
Shipping Condition:	Room Temperature



Applications

Probe for ROS

References:

1. Myc inhibition impairs autophagosome formation.
Toh PP, Luo S, Menzies FM, Raskó T, Wanker EE, Rubinsztein DC,
Hum Mol Genet (2013) 22:5237-5248
2. Visualization and quantitation of cyclooxygenase-1 and -2 activity by digital fluorescence microscopy.
Ornberg RL, Koki AT
Eicosanoids and Other Bioactive Lipids in Cancer Inflammation, and Radiation Injury, 4, Honn KV, Mar 1999; (na):na pp. 131-137
3. Cellular carbonyl stress enhances the expression of plasminogen activator inhibitor-1 in rat white adipocytes via reactive oxygen species-dependent pathway.
Uchida Y, Ohba K, Yoshioka T, Irie K, Muraki T, Maru Y

J Biol Chem (2004) 279:4075-4083