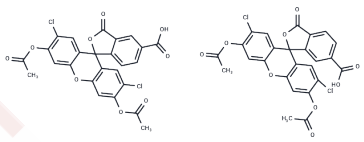
# Data Sheet (Cat.No.T38123)

TargetMol

## 5(6)-Carboxy-2′,7′-dichlorofluorescein diacetate

### Chemical Properties



CAS No. : 127770-45-0

Formula: C25H14Cl2O9

Molecular Weight: 529.3

Storage: Keep away from direct sunlight
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

### Biological Description

| | |
|---|---|
| Description | 5(6)-Carboxy-2',7'-dichlorofluorescein diacetate is an oxidant-sensitive and cell-permeable fluorescent probe.1Base hydrolysis of the ester bonds by intracellular esterases releases the acetate groups and the resulting compound, 5(6)-carboxy-2',7',-dichlorofluorescein, is oxidized by reactive oxygen species (ROS) and nitric oxide (NO) and displays excitation/emission maxima of 504 and 530 nm, respectively, which can be quantified as a measure of oxidant production. |
| Targets(IC50) | Others,Reactive Oxygen Species |

### Solubility Information

| | |
|---|---|
| Solubility | DMF: 30 mg/mL (56.68 mM),Sonication is recommended.<br>DMSO: 30 mg/mL (56.68 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 1.8893 mL | 9.4464 mL | 18.8929 mL |
| 5 mM | 0.3779 mL | 1.8893 mL | 3.7786 mL |
| 10 mM | 0.1889 mL | 0.9446 mL | 1.8893 mL |
| 50 mM | 0.0378 mL | 0.1889 mL | 0.3779 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Hempel, S.L., Buettner, G.R., O'Malley, Y.Q., et al.Dihydrofluorescein diacetate is superior for detecting intracellular oxidants: Comparison with 2',7'-dichlorodihydrofluorescein diacetate, 5(and 6)-carboxy-2',7'-dichlorodihydrofluorescein diacetate, and dihydrorhodamine 123Free Radic. Biol. Med.27(1-2)146-159(1999)



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