

## Carboxy-H<sub>2</sub>DCFDA [5-(and 6)-Carboxy-2',7'-dichlorodihydrofluorescein diacetate]

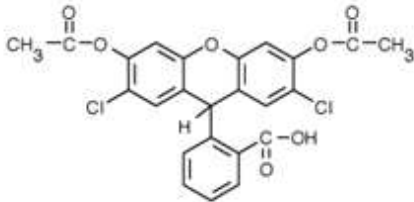
Catalog Number	Packaging Size
C264	25 mg

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

### Introduction

**Carboxy-H<sub>2</sub>DCFDA** [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<sub>2</sub>DCFDA 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

<b>Label:</b>	2',7'-dichlorofluorescein	
<b>Ex/Em:</b>	495/529 nm	
<b>Detection Method:</b>	Fluorescent	
<b>Molecular Formula:</b>	C <sub>25</sub> H <sub>16</sub> Cl <sub>2</sub> O <sub>9</sub>	
<b>Molecular Weight:</b>	531.30	
<b>CAS Number:</b>	-	
<b>Storage Conditions:</b>	-20°C, protected from light	
<b>Shipping Condition:</b>	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