

CDCF [5-(and-6)-Carboxy-2',7'-dichlorofluor escein] *Mixed isomers*

Catalog number: 235 Unit size: 100 mg

Product Details

Storage Conditions Freeze (<-15 °C), Minimize light exposure

Expiration Date 12 months upon receiving

Chemical Properties

Appearance Orange solid

Molecular Weight 445.21

Soluble In DMSO

Chemical Structure

Spectral Properties

Excitation Wavelength 505 nm

Emission Wavelength 526 nm

Applications

CDCF [5(6)-carboxy-2',7'-dichlorofluorescein] is the fluorescent product of 5(6)-carboxy-2',7'-dichlorodihydrofluorescein diacetate and 5(6)-carboxy-2',7'-dichlorofluorescein diacetate in cells. The cell-permeant 5(6)-carboxy-2',7'-dichlorodihydrofluorescein diacetate (H2DCFDA) (also known as dichlorofluorescin diacetate) is a chemically reduced form of fluorescein used as an indicator for reactive oxygen species (ROS) in cells, for example to detect the generation of reactive oxygen intermediates in neutrophils and macrophages. Upon cleavage of the acetate groups by intracellular esterases and oxidation, the non-fluorescent H2DCFDA is converted to the highly fluorescent CDCF. 5(6)-carboxy-2',7'-dichlorofluorescein diacetate staining is used for studying multidrug resistance proteins [MRPs and P-glycoprotein (Pgp)].