

FT-46630A

CDCF, Carboxydichlorofluorescein

Product Information

Name :	CDCFDA , 5-(and-6)-carboxy-2',7'-dichlorofluorescein diacetate
Catalog Number :	FP-46630A , 100 mg
Structure :	C ₂₅ H ₁₄ Cl ₂ O ₉
Molecular Weight :	529.29
Soluble in:	DMSO
Absorption / Emission :	$\lambda_{exc} \backslash \lambda_{em}$ (pH 4, after hydrolysis) = 495 / 529 nm $\lambda_{exc} \backslash \lambda_{em}$ (pH 8, after hydrolysis) = 504 / 529 nm
EC (M⁻¹ cm⁻¹) :	At pH 4 = 38 000 At pH 8 = 107 000

Name :	CDCF , 5-(and-6)-carboxy-2',7'-dichlorofluorescein
Catalog Number :	FP-46629A , 100 mg
Structure :	C ₂₁ H ₁₀ Cl ₂ O ₇
Molecular Weight :	445.21
Soluble in:	DMF or pH>6
Absorption / Emission :	$\lambda_{exc} \backslash \lambda_{em}$ (pH 4) = 495 / 529 nm $\lambda_{exc} \backslash \lambda_{em}$ (pH 8) = 504 / 529 nm
EC (M⁻¹ cm⁻¹) :	At pH 4 = 38 000 At pH 8 = 107 000

Name :	5-CDCF , 5-carboxy-2',7'-dichlorofluorescein
Catalog Number :	FP-AM3021 , 100 mg
Structure :	C ₂₁ H ₁₀ Cl ₂ O ₇
Molecular Weight :	445.21
Soluble in:	DMSO
Absorption / Emission :	$\lambda_{exc} \backslash \lambda_{em}$ (pH 4) = 495 / 529 nm $\lambda_{exc} \backslash \lambda_{em}$ (pH 8) = 504 / 529 nm
EC (M⁻¹ cm⁻¹) :	At pH 4 = 38 000 At pH 8 = 107 000

Storage: +4°C (or -20°C for long term) (K). Protect from light and moisture

Introduction

CDCF has a low pKa. It is a useful probe for viability and cytotoxicity assays, and for studies of cell compartments having an acidic pH, like endocytosis and phagocytosis vacuoles, as well as other vacuoles, acrosome of spermatozoa....

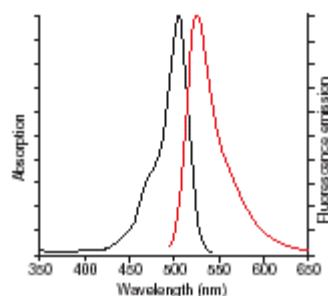
It is available as a diacetate derivative for more convenient loading, and as a Succinimidyl ester for biomolecules *in vitro* or *in vivo* labeling, that can be followed up in living cells.

FT-46630A

CDCFDA is a membrane-permeant probe and thus can be loaded into cells via incubation. The diacetate is readily hydrolyzed to CDCF by intracellular esterases.

CDCF does not readily enter cells but can be loaded by injection. It may be useful for acidic pH measurements, i.e. as fluid phase marker for endocytosis.

5-CDCF is a single 5-isomer of CDCF and is used for specific applications.



Absorption and emission spectra of CDCF (FP-46629A)

Directions for use

Protocol may found in the literature.

References

- Abe F., *et al.*, « Hydrostatic Pressure Enhances Vital Staining with Carboxyfluorescein or Carboxydichlorofluorescein in *Saccharomyces cerevisiae*: Efficient Detection of Labeled Yeasts by Flow Cytometry », *Appl. Envir. Microbiol.*, **64**, 1139(1998) [Article](#)
- Kurose I., *et al.*, « Microvascular Responses to Inhibition of Nitric Oxide Production : Role of Active Oxidants », *Circ. Res.*, **76**, 30(1995) [Article](#)

Related Products

- DCDF-SE, FP-BB4380
- CFDA-SE, FP-52493A
- CDCFDA-SE, FP-52495A

Ordering information

Catalog size quantities and prices may be found at <http://www.fluoprobes.com>
Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : FluoProbes® / Interchim; Hotline : +33(0)4 70 03 73 06

Disclaimer : Materials from FluoProbes® are sold **for research use only**, and are not intended for food, drug, household, or cosmetic use. FluoProbes® is not liable for any damage resulting from handling or contact with this product.

Rev.F06VB