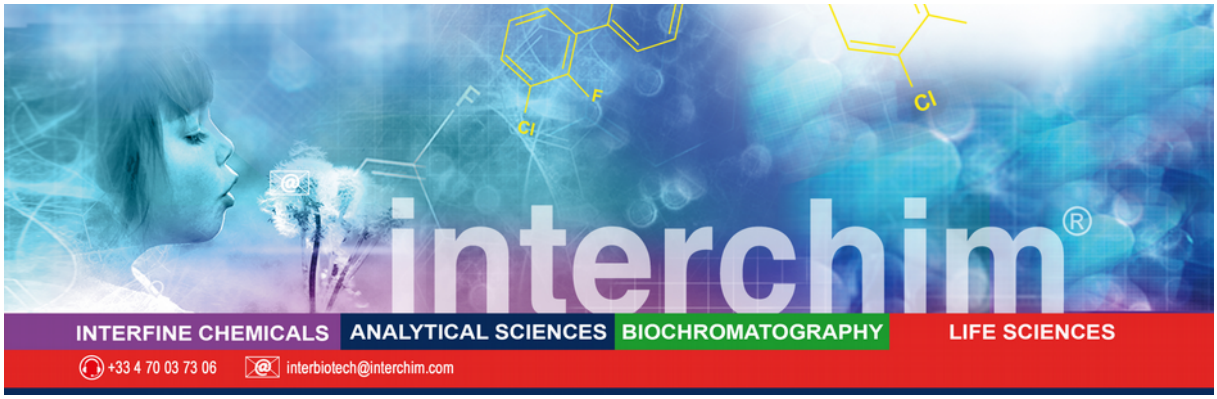
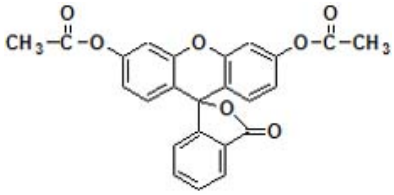
FT-29403A



FDA

Fluorescent indicator for cell viability and also could be used to detect cell adhesion

Product Description



Name :	**Fluorescein diacetate (FDA)** Spiro(isobenzofuran-1(3H),9'-(9H)- xanthen)-3-one, 3',6'-bis(acetyloxy)-, 3,6-Diacetoxyfluoran, Di-O-acetylfluorscein
Catalog Number :	FP-29403A, 1 g FP-29403B, 5 g
Structure :	$C_{24}H_{16}O_7$
Molecular Weight :	MW= 416,38
Solubility:	DMSO, DMF, CH_3CN and $CHCl_3$ and basic H_2O
Absorption / Emission :	$\lambda_{exc}\backslash\lambda_{em}$ (pH 9) = 490 / 514 nm

Storage: -20°C Protect from light and moisture

Introduction

FDA is a non-fluorescent hydrophobic fluorescein derivative that can pass through the cell membrane whereupon intracellular esterases hydrolyze the diacetate group producing the highly fluorescent product fluorescein. The fluorescein molecules accumulate in cells that possess intact membranes so the green fluorescence can be used as a marker of cell viability. Cells that do not possess an intact cell membrane or an active metabolism may not accumulate the fluorescent product and therefore do not exhibit green fluorescence. FDA may be used in combination with PI staining as the non-viable cells take up the PI and stain dead cells red whereas viable cells do not take up the PI and should only stain green. This 2-color separation of non-viable and viable cells may provide a more accurate quantitation of cell viability than single color analysis.

Directions for use

Guidelines for use

- Concentration of the stock solution: 50 mM in dimethylsulphoxide (DMSO)
- Final concentration: 20-50 µM

Protocol may be found in the literature.

References

- **Adamczyk B**., MIKC* MADS Domain Heterodimers Are Required for Pollen Maturation and Tube Growth in Arabidopsis, Plant Physiology 149:1713-1723 (2009) Article
- **Oh D.-H.** *et al*., Loss of Halophytism by Interference with SOS1 Expression, *Plant Physiology* (2009) 10.1104/pp.109.137802 Article
- **Schnürer J. & Rosswall T**., Fluorescein Diacetate Hydrolysis as a Measure of Total Microbial Activity in Soil and Litter, *Appl. Envir. Microbiol*., 43: 1256 - 1261 (1982) Article
- **Schupp D. & Erlandsen S**., A new method to determine Giardia cyst viability: correlation of fluorescein diacetate and propidium iodide staining with animal infectivity, *Appl. Envir. Microbiol*., 53: 704 - 707 (1987) Article

Related products

- DAPI, FP-371867
- Propidium iodide, FP-31238B
- H2FDA, FP-64168A
- H2DCFDA, FP-467312
- CFDA, FP-33953A
- ADHP peroxidase substrate, FP-39423A

Ordering information

Catalog size quantities and prices may be found at www.interchim.com/
Please inquire for higher quantities (availability, shipment conditions).

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