

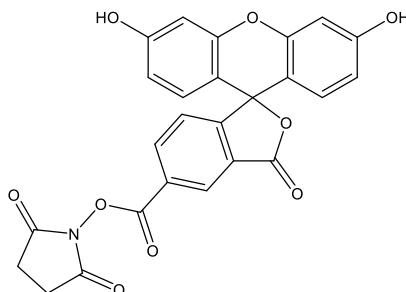
Catalog # 10-5164

CFSE

92557-80-7

5-Carboxyfluorescein N-succinimidyl ester; 5-Carboxyfluorescein NHS ester; 5-FAM-SE

Lot # X109902



CFSE is a fluorophore which can diffuse into cells and covalently react with intracellular proteins via its activated carboxy group and thus be retained in the cell for long periods of time.¹ CFSE fluorescence can be used to analyze cell proliferation², track cell migration³ and in applications such as flow cytometry⁴.
Excitation/emission max: 491 and 518 nm.

- 1) Breeuwer *et al.* (1996), *A Novel Method for Continuous Determination of the Intracellular pH in Bacteria with the Internally Conjugated Fluorescent Probe 5 (and 6-)Carboxyfluorescein Succinimidyl Ester*, *Appl. Environ. Microbiol.*, **62** 178
- 2) Lyons *et al.* (2000) *Analysing cell division in vivo and in vitro using flow cytometric measurement of CFSE dye dilution*; *J. Immunol. Methods*, **243** 147
- 3) Parrish *et al.* (2009) *Use of the intracellular fluorescent dye CFSE to Monitor lymphocyte migration and proliferation*; *Curr. Protoc. Immunol., Suppl.* **84** 4.9.1
- 4) Kandg *et al.* (2023) *Cytotoxicity of Human Hepatic Intra-sinusoidal Gamma/Delta T Cells Depends of Phospho-antigen and NK Receptor Signaling*; *Anticancer Res.*, **43** 63

PHYSICAL DATA

Molecular Weight: 473.39
Molecular Formula: C₂₅H₁₅NO₉
Purity: >97% by TLC
NMR: (Conforms)
Solubility: DMSO (35 mg/ml)
Physical Description: Orange solid
Storage and Stability: Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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