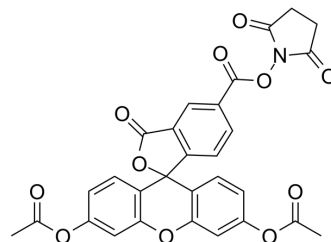


## 5-Carboxyfluorescein diacetate N-succinimidyl ester

<b>Cat. No.:</b>	HY-D0056
<b>CAS No.:</b>	150206-05-6
<b>Molecular Formula:</b>	C <sub>29</sub> H <sub>19</sub> NO <sub>11</sub>
<b>Molecular Weight:</b>	557.46
<b>Target:</b>	Fluorescent Dye
<b>Pathway:</b>	Others
<b>Storage:</b>	-20°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 20.83 mg/mL (37.37 mM); ultrasonic and warming and heat to 60°C)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.7939 mL	8.9693 mL	17.9385 mL
	5 mM	0.3588 mL	1.7939 mL	3.5877 mL
	10 mM	0.1794 mL	0.8969 mL	1.7939 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

5-Carboxyfluorescein diacetate N-succinimidyl ester is a cell permeable dye (Ex=492 nm, Em=517 nm). 5-Carboxyfluorescein diacetate N-succinimidyl ester can label cells by covalently binding to intracellular molecules. 5-Carboxyfluorescein diacetate N-succinimidyl ester is used to track lymphocyte migration and proliferation<sup>[1]</sup>.

#### In Vitro

Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs)<sup>[1]</sup>.

1. Dilute the stock solution in PBS (to give a 50 μM solution).
2. Add 110 μL of this solution per milliliter of cells (to give a final concentration of 5 μM) and mix rapidly.
3. After 5 min at room temperature, add 10 vol of PBS containing 5% FBS.
4. Centrifuge cells 5 min at 300 ×g, 20 min.
5. Remove the supernatant, and wash threetimes, each time by resuspending in 10 vol PBS containing 5% FBS.
6. Centrifuge cells 5 min at 300 ×g, 20 min, and remove the supernatant.

Note: Labeling occurs rapidly, and it is essential that the tracker is dispersed as evenly and quickly as possible so that cells are uniformly labeled.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## CUSTOMER VALIDATION

- Biomaterials. 2023 Aug 29;302:122297.
- Cell Death Discov. 2023 Nov 28;9(1):427.
- PLoS Pathog. 2023 Apr 14;19(4):e1011329.
- Int J Pharm. 2023 Dec 1:123640.
- bioRxiv. 2023 Oct 20.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

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## REFERENCES

[1]. Christopher R Parish, et al. Use of the intracellular fluorescent dye CFSE to monitor lymphocyte migration and proliferation. Curr Protoc Immunol. 2009 Feb;Chapter 4:Unit4.9.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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