Fluorescein

Cat. No.: HY-D0251

CAS No.: 2321-07-5

Molecular Formula: $C_{20}H_{12}O_5$

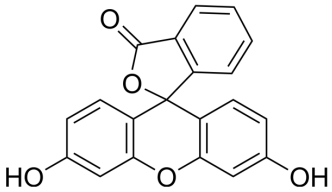
Molecular Weight: 332

Target: Fluorescent Dye

Pathway: Others

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 83.33 mg/mL (250.99 mM; Need ultrasonic)

H_2O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	3.0120 mL	15.0602 mL	30.1205 mL
5 mM	0.6024 mL	3.0120 mL	6.0241 mL
10 mM	0.3012 mL	1.5060 mL	3.0120 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (6.27 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (6.27 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Fluorescein (Uranine) is widely used as a fluorescent tracer in medicinal and biological applications and tumor infected tissues tracer. Fluorescein (Uranine) is a representative green fluorophore that has been widely used as a scaffold of practically useful green fluorescent probes[1][2].

In Vitro

Fluorescein is a synthetic organic photoactive dye compound soluble in water, alcohol and polar solvents[1].

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

CUSTOMER VALIDATION

- Sci Bull. 2023 Dec 26.
- Cell Death Dis. 2023 Feb 7;14(2):91.

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REFERENCES

[1]. RobertSjöback, et al. Absorption and fluorescence properties of fluorescein. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy

[2]. Nabel A Negm, et al. Fluorescein dye derivatives and their nanohybrids: Synthesis, characterization and antimicrobial activity. J Photochem Photobiol B. 2016 Sep;162:421-433.

[3]. Li Liu, et al. Fluorescein as an artificial enzyme to mimic peroxidase. Chem Commun (Camb). 2016 Nov24;52(96):13912-13915.

[4]. Hirabayashi K, et al. Analysis of chemical equilibrium of silicon-substituted fluorescein and its application to develop a scaffold for red fluorescent probes. Anal Chem. 2015;87(17):9061-9069.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA