BCECF

Cat. No.: HY-101882

CAS No.: 85138-49-4

Molecular Formula: $C_{54}H_{40}O_{22}$

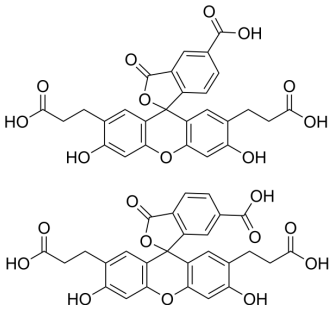
Molecular Weight: 520.44

Target: Fluorescent Dye

Pathway: Others

Storage: -20°C, protect from light

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



SOLVENT & SOLUBILITY

In Vitro

DMSO : 62.5 mg/mL (120.09 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.9215 mL	9.6073 mL	19.2145 mL
	5 mM	0.3843 mL	1.9215 mL	3.8429 mL
	10 mM	0.1921 mL	0.9607 mL	1.9215 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 (4.00 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

BCECF is a pH-sensitive fluorescent dye. BCECF allows measurements in the physiological pH range 6.0–8.0. Excitation ratio: 490/440 nm; Emission intensity: 535 nm.

In Vitro

Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs).
1. Prepare a 2-20 mM stock solution of BCECF in DMSO and store at -20℃.
2. Prepare a 5-50 μM BCECF dye-loading solution in buffer solutions (Hepes, pH 7.4 or PBS).
3. Add 1000 μL/well (6-well plate),100 μL/well (96-well plate) or 25 μL/well (384-well plate) BCECF dye-loading solution into the cell plate.
4. Incubate the dye-loading plate in a cell incubator about 30minutes.
5. Wash and replace the dye-loading solution with buffers.
6. Run the pH assay by monitoring the fluorescence at E_x/E_m = 490/535 nm or 430/535 nm for ratio measurements.

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

CUSTOMER VALIDATION

- Microorganisms. 2021, 9(9), 1951.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Scott DA, et al. Analysis of the uptake of the fluorescent marker 2',7'-bis-(2-carboxyethyl)-5(and-6)-carboxyfluorescein (BCECF) by hydrogenosomes in Trichomonas vaginalis. Eur J Cell Biol. 1998 Jun;76(2):139-45.

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