Coumarin 6H

Cat. No.: HY-121930

CAS No.: 58336-35-9

Molecular Formula: $C_{15}H_{15}NO_2$

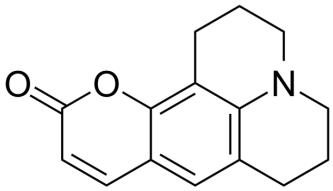
Molecular Weight: 241.29

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 : 12.5 mg/mL (51.80 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	4.1444 mL	20.7220 mL	41.4439 mL
	5 mM	0.8289 mL	4.1444 mL	8.2888 mL
	10 mM	0.4144 mL	2.0722 mL	4.1444 mL

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

BIOLOGICAL ACTIVITY

Description

Coumarin 6H, a Coumarin (Coumarin (HY-N0709)) derivative, is a laser dye. The fluorescence emission of Coumarin 6H can be enhanced by hydrogen bonding interactions[1][2].

In Vitro

The Coumarin 6H with twistblocked and stronger electron-donating julolidine group exhibits higher quantum yield, better biocompatibility, as well as less background fluorescence when suppressed by a fluorescence quenching group. Thus, the Coumarin 6H in probe LH-1 may help to reduce the background fluorescence. In probe LH-1, the fluorescence of Coumarin 6H fluorophore not only can be quenched by the rotation of N-N group, but also can be quenched by the 2,4-dinitrobenzenze group via donor-excited photoinduced electron transfer (d-PET) mechanism[2].

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

REFERENCES

[1]. P M French, et al. Passively mode-locked cw Coumarin 6 ring dye laser. Opt Lett. 1989 Feb 15;14(4):217-8.

[2]. Zhixiang Han, et al. A novel fluorescent probe with extremely low background fluorescence for sensing hypochlorite in zebrafish. Anal Biochem. 2020 Aug 1;602:113795.

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

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