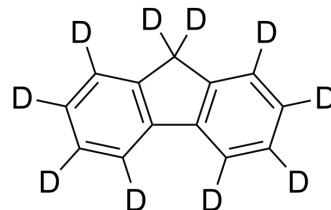


Fluorene-d₁₀

Cat. No.:	HY-W026772S		
CAS No.:	81103-79-9		
Molecular Formula:	C ₁₃ D ₁₀		
Molecular Weight:	176.28		
Target:	Fluorescent Dye; Isotope-Labeled Compounds		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (283.64 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
Preparing Stock Solutions	1 mM	5.6728 mL	28.3640 mL	56.7279 mL
	5 mM	1.1346 mL	5.6728 mL	11.3456 mL
	10 mM	0.5673 mL	2.8364 mL	5.6728 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: ≥ 1.25 mg/mL (7.09 mM); Clear solution			

BIOLOGICAL ACTIVITY

Description	Fluorene-d ₁₀ is the deuterium labeled Fluorene. Fluorene, a polycyclic aromatic hydrocarbon (PAH), is a precursor to other fluorene compounds. Fluorene and its derivative can be used as a precursor to fluorene-based dyes ^[1] .
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

[2]. Paul Olusegun Bankole, et al. Biodegradation of fluorene by the newly isolated marine-derived fungus, *Mucor irregularis* strain bpo1 using response surface methodology. *Ecotoxicol Environ Saf.* 2021 Jan 15;208:111619.

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