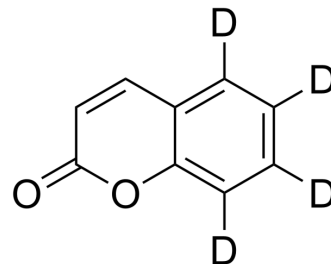


Coumarin-d₄

Cat. No.:	HY-N0709S		
CAS No.:	185056-83-1		
Molecular Formula:	C ₉ H ₂ D ₄ O ₂		
Molecular Weight:	150.17		
Target:	Influenza Virus		
Pathway:	Anti-infection		
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 (332.96 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	6.6591 mL	33.2956 mL	66.5912 mL
	5 mM	1.3318 mL	6.6591 mL	13.3182 mL
	10 mM	0.6659 mL	3.3296 mL	6.6591 mL

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

BIOLOGICAL ACTIVITY

Description

Coumarin-d₄ is the deuterium labeled Coumarin. Coumarin is the primary bioactive ingredient in Radix Glehniae, named Beishashen in China, which possesses many pharmacological activities, including anticancer, anti-inflammation and antiviral activities.

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]. Liu M, et al. Quantitative analysis of nine coumarins in rat urine and bile after oral administration of Radix Glehniae extract by high-performance liquid chromatography-electrospray ionization tandem mass spectrometry. Biomed Chromatogr. 2011 Jul;25(7):783-93.

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