Proteins



cis-Urocanic acid-13C₃

Cat. No.: HY-113008AS $C_3^{13}C_3H_4N_2O_2$ Molecular Formula:

Molecular Weight:

Target: 5-HT Receptor; Isotope-Labeled Compounds Pathway: GPCR/G Protein; Neuronal Signaling; Others

Storage: -20°C, stored under nitrogen

* In solvent: -80°C, 6 months; -20°C, 1 month (stored under nitrogen)

SOLVENT & SOLUBILITY

In Vitro

H₂O: 50 mg/mL (359.48 mM; Need ultrasonic and warming)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	7.1896 mL	35.9479 mL	71.8959 mL
	5 mM	1.4379 mL	7.1896 mL	14.3792 mL
	10 mM	0.7190 mL	3.5948 mL	7.1896 mL

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

BIOLOGICAL ACTIVITY

Description cis-Urocanic acid- 13 C₃ is the 13 C-labeled cis-Urocanic acid. cis-Urocanic acid is a 5-HT2A receptor agonist. cis-Urocanic acid

binds to 5-HT receptor with relatively high affinity (Kd=4.6 nM). cis-Urocanic acid is an immune modulator that induces

immunosuppression by binding to the 5-HT2A receptor[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]. Walterscheid JP, et al. Cis-urocanic acid, a sunlight-induced immunosuppressive factor, activates immune suppression via the 5-HT2A receptor. Proc Natl Acad Sci U S A. 2006 Nov 14;103(46):17420-5.



Page 2 of 2 www.MedChemExpress.com