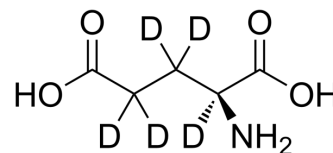


L-Glutamic acid-d₅

Cat. No.:	HY-14608S7		
CAS No.:	2784-50-1		
Molecular Formula:	C ₅ H ₄ D ₅ NO ₄		
Molecular Weight:	152.16		
Target:	Apoptosis; iGluR; Ferroptosis; Endogenous Metabolite		
Pathway:	Apoptosis; Membrane Transporter/Ion Channel; Neuronal Signaling; Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	H ₂ O : 14.29 mg/mL (93.91 mM); ultrasonic and warming and heat to 60°C)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	6.5720 mL	32.8601 mL	65.7203 mL
		5 mM	1.3144 mL	6.5720 mL	13.1441 mL
10 mM		0.6572 mL	3.2860 mL	6.5720 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: PBS Solubility: 7.14 mg/mL (46.92 mM); Clear solution; Need ultrasonic and warming and heat to 60°C				

BIOLOGICAL ACTIVITY

Description	L-Glutamic acid-d ₅ is the deuterium labeled L-Glutamic acid. L-Glutamic acid acts as an excitatory transmitter and an agonist at all subtypes of glutamate receptors (metabotropic, kainate, NMDA, and AMPA). L-Glutamic acid shows a direct activating effect on the release of DA from dopaminergic terminals.
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

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

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