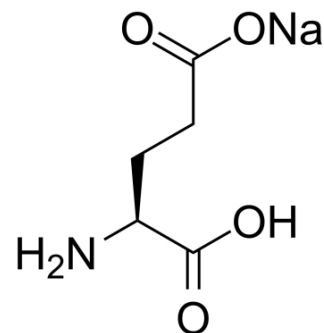


L-Glutamic acid monosodium salt

Cat. No.:	HY-14608A		
CAS No.:	142-47-2		
Molecular Formula:	C ₅ H ₈ NNaO ₄		
Molecular Weight:	169.11		
Target:	iGluR; Apoptosis; Ferroptosis		
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling; Apoptosis		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

H₂O : 7.14 mg/mL (42.22 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	5.9133 mL	29.5666 mL	59.1331 mL
5 mM	1.1827 mL	5.9133 mL	11.8266 mL
10 mM	0.5913 mL	2.9567 mL	5.9133 mL

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

BIOLOGICAL ACTIVITY

Description

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

PROTOCOL

Animal Administration ^[1]

For toxicity experiments, mice at PND9 (n=3-9 mice per group) are treated as follows. Two groups receive a subcutaneous (s.c.) injection of corn oil, following, 30 min later, by s.c. injection of either saline or L-Glutamic acid monosodium salt (3 g/kg); two additional groups are treated with 3,4-dihydro-2 H-pyrano[2,3-b]quinolin-7-yl-(cis-4-methoxycyclohexyl)-methanone, dissolving in corn oil (2.5 mg/kg) following, 30 min later, by a s.c. injection of either saline or L-Glutamic acid monosodium salt. In another set of experiments, four groups of crv4 mice or their wild-type littermates (n=5-7 mice per group) are injected s.c. with either saline or L-Glutamic acid monosodium salt (3 g/kg)^[1].

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

REFERENCES

[1]. Liberatore F, et al. Permissive role for mglu1 metabotropic glutamate receptors in excitotoxic retinal degeneration. *Neuroscience*. 2017 Sep 14. pii: S0306-4522(17)30640-1.

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