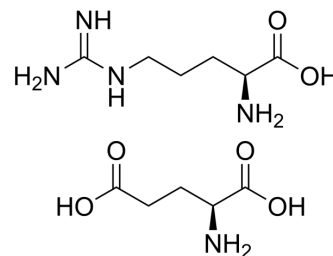


L-Arginine (L-glutamate)

Cat. No.:	HY-N0455B		
CAS No.:	4320-30-3		
Molecular Formula:	C ₁₁ H ₂₃ N ₅ O ₆		
Molecular Weight:	321.33		
Target:	Endogenous Metabolite; NO Synthase		
Pathway:	Metabolic Enzyme/Protease; Immunology/Inflammation		
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 : 100 mg/mL (311.21 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	3.1121 mL	15.5603 mL	31.1207 mL
5 mM	0.6224 mL	3.1121 mL	6.2241 mL
10 mM	0.3112 mL	1.5560 mL	3.1121 mL

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

BIOLOGICAL ACTIVITY

Description

L-Arginine L-glutamate ((S)-(+)-Arginine L-glutamate) is the nitrogen donor for synthesis of nitric oxide. L-Arginine L-glutamate can be used for upper gastrointestinal hypofunction or dysfunction like functional dyspepsia research^[1].

IC₅₀ & Target

Microbial Metabolite Human Endogenous Metabolite

In Vivo

L-Arginine L-glutamate (10-30 mg/kg, p.o.) dose-dependently promotes gastric emptying in rats. This effect is dependent on vagus nerve activation. Intra-gastric L-Arginine L-glutamate (3-30 mg/kg intra-gastrically) also dose-dependently enhances adaptive relaxation of rat stomachs.

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

CUSTOMER VALIDATION

- Nat Protoc. 2021 Jan;16(1):431-457.
- Nutrients. 2023 Oct 18, 15(20), 4427.
- Viruses. 2021 Jun 26;13(7):1236.
- Dig Dis Sci. 2022 Jul 4.
- Pancreas. 2020 Jan;49(1):111-119.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Ikumi Ishibashi-Shiraishi, et al. L-Arginine L-Glutamate Enhances Gastric Motor Function in Rats and Dogs and Improves Delayed Gastric Emptying in Dogs. J Pharmacol Exp Ther. 2016 Nov;359(2):238-246.

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

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