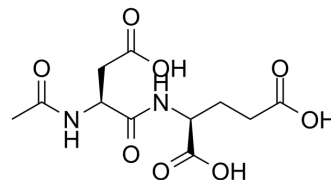


Spaglumic Acid

Cat. No.:	HY-100921		
CAS No.:	3106-85-2		
Molecular Formula:	C ₁₁ H ₁₆ N ₂ O ₈		
Molecular Weight:	304.25		
Target:	Endogenous Metabolite		
Pathway:	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 : 250 mg/mL (821.69 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	3.2868 mL	16.4339 mL	32.8677 mL
		5 mM	0.6574 mL	3.2868 mL	6.5735 mL
10 mM		0.3287 mL	1.6434 mL	3.2868 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: PBS Solubility: 100 mg/mL (328.68 mM); Clear solution; Need ultrasonic				

BIOLOGICAL ACTIVITY

Description	Spaglumic Acid (N-Acetylaspartylglutamic acid) is a neuropeptide found in millimolar concentrations in brain.
IC ₅₀ & Target	Human Endogenous Metabolite
In Vitro	Spaglumic Acid (N-Acetylaspartylglutamate; NAAG) is released upon depolarization by a Ca ²⁺ -dependent process and is an agonist at mGluR3 receptors and an antagonist at NMDA receptors. Spaglumic Acid is catabolized to N-acetylaspartate and glutamate primarily by glutamate carboxypeptidase II, which is expressed on the extracellular surface of astrocytes. The levels of Spaglumic Acid and the activity of carboxypeptidase II are altered in a regionally specific fashion in several neuropsychiatric disorders ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Coyle JT. The nagging question of the function of N-acetylaspartylglutamate. *Neurobiol Dis.* 1997;4(3-4):231-8.

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

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