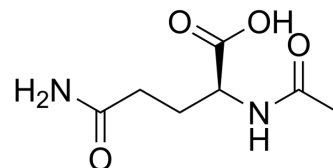


## Aceglutamide

<b>Cat. No.:</b>	HY-B1065		
<b>CAS No.:</b>	2490-97-3		
<b>Molecular Formula:</b>	C <sub>7</sub> H <sub>12</sub> N <sub>2</sub> O <sub>4</sub>		
<b>Molecular Weight:</b>	188.18		
<b>Target:</b>	Autophagy; Endogenous Metabolite		
<b>Pathway:</b>	Autophagy; Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 33.33 mg/mL (177.12 mM; Need ultrasonic)  
 DMSO : 16.67 mg/mL (88.59 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	5.3141 mL	26.5703 mL	53.1406 mL
	5 mM	1.0628 mL	5.3141 mL	10.6281 mL
	10 mM	0.5314 mL	2.6570 mL	5.3141 mL

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

#### In Vivo

- Add each solvent one by one: PBS  
Solubility: 20 mg/mL (106.28 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 1.67 mg/mL (8.87 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 1.67 mg/mL (8.87 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 1.67 mg/mL (8.87 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Aceglutamide (α-N-Acetyl-L-glutamine) is a psychostimulant and nootropic, used to improve memory and concentration<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

Human Endogenous Metabolite	Human Endogenous Metabolite
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## REFERENCES

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[1]. Dandan Wang, et al, Development and Validation of a RP-HPLC Method for the Simultaneous Determination of Aceglutamide and Oxiracetam in an Injection Formulation, Journal of Chromatographic Science, Volume 53, Issue 5, May/June 2015, Pages 767–770,

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**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](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA