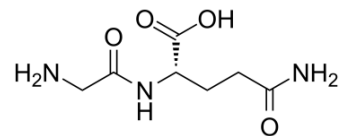


## Glycyl-glutamine

Cat. No.:	HY-117541		
CAS No.:	13115-71-4		
Molecular Formula:	C <sub>7</sub> H <sub>13</sub> N <sub>3</sub> O <sub>4</sub>		
Molecular Weight:	203.2		
Target:	Others		
Pathway:	Others		
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<sub>2</sub>O : 62.5 mg/mL (307.58 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	4.9213 mL	24.6063 mL	49.2126 mL
	5 mM	0.9843 mL	4.9213 mL	9.8425 mL
	10 mM	0.4921 mL	2.4606 mL	4.9213 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Glycyl-glutamine (Glycyl-L-glutamine), as a enzymatic cleavage product of β-endorphin, is apparently an endogenous antagonist of beta-endorphin(1-31) in several systems<sup>[1]</sup>. Glycyl-glutamine (Glycyl-L-glutamine) is an activate and stable glutamine-containing neuropeptide over glutamine (Gln)<sup>[2]</sup>.

#### In Vitro

Glycyl-glutamine (Glycyl-L-glutamine) is an activate and stable glutamine-containing neuropeptide. Glycyl-glutamine (Glycyl-L-glutamine) has an advantage over free glutamine (Gln) as growth factors for cell culture during both autoclaving and storage<sup>[2]</sup>.

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

#### In Vivo

Glycyl-glutamine (Glycyl-L-glutamine) (0.3, 0.6, 1.0 and 10.0 nM) can dose-dependently inhibit beta-End-(1-31)-induced hypotension in pentobarbital-anesthetized rats<sup>[1]</sup>.

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

### REFERENCES

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[1]. Unal CB1, et al. Beta-endorphin-induced cardiorespiratory depression is inhibited by glycyl-L-glutamine, a dipeptide derived from beta-endorphin processing. *J Pharmacol Exp Ther.* 1994 Nov;271(2):952-8

[2]. Roth E, et al. Influence of two glutamine-containing dipeptides on growth of mammalian cells. *In Vitro Cell Dev Biol.* 1988 Jul;24(7):696-8.

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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