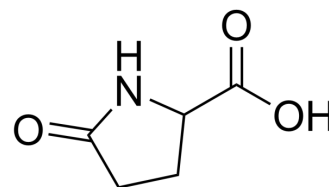


DL-Pyroglutamic acid

Cat. No.:	HY-W012738		
CAS No.:	149-87-1		
Molecular Formula:	C ₅ H ₇ NO ₃		
Molecular Weight:	129.11		
Target:	Influenza Virus; GABA Receptor		
Pathway:	Anti-infection; Membrane Transporter/Ion Channel; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (774.53 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	7.7453 mL	38.7267 mL	77.4533 mL
		5 mM	1.5491 mL	7.7453 mL	15.4907 mL
10 mM		0.7745 mL	3.8727 mL	7.7453 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (19.36 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	DL-Pyroglutamic acid (CAE) as an inactivator of hepatitis B surface, inactivates vaccinia virus, herpes simplex virus, and influenza virus except poliovirus. DL-Pyroglutamic acid is also a possible inhibitor of GABA transaminase, increases GABA amount with antiepileptic action ^{[1][2]} .
In Vitro	DL-Pyroglutamic acid results 50 and 100% inactivation of the antigen of 0.01-0.025% and 0.025-0.05%, respectively ^[1] . DL-Pyroglutamic acid is a possible glutamate antagonist, blocks glutamate miniature-end-plate potential in locust muscle-Druce and Bradford ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	DL-Pyroglutamic acid (0.775 mM/L) completely abolishes the myoclonic jerks and EEG spikes in rats model of epileptic by cobalt implantation in the sensorimotor cerebral cortex ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Sugimoto Y, et al. N-alpha-Cocoyl-L-arginine ethyl ester, DL-pyroglutamic acid salt, as an inactivator of hepatitis B surface antigen. Antimicrob Agents Chemother. 1979 Sep;16(3):329-32.

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

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