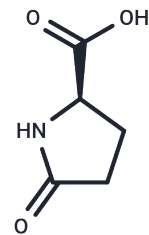


(R)-5-Oxopyrrolidine-2-carboxylic acid

Chemical Properties

CAS No. :	4042-36-8
Formula:	C ₅ H ₇ NO ₃
Molecular Weight:	129.11
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	(R)-5-Oxopyrrolidine-2-carboxylic acid (D-Pyroglutamic acid) is a cyclic derivative of glutamic acid, physiologically present in mammalian tissues. It releases GABA from the cerebral cortex and exhibits anti-anxiety effects in a simple approach-avoidance conflict situation in rats. In clinical pharmacology experiments, it significantly shortens the plasma half-life of ethanol during acute intoxication.
Targets(IC50)	Endogenous Metabolite

Solubility Information

Solubility	DMSO: 55 mg/mL (425.99 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (15.49 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
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
50 mM	0.1549 mL	0.7745 mL	1.5491 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Palekar AG, et al. Accumulation of 5-oxo-L-proline and 5-oxo-D-proline in the blood plasma in end stage renal disease. Biochem Med. 1975 Nov;14(3):339-45.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481