Data Sheet (Cat.No.T20555)

TargetMol

Glycyltyrosine

Chemical Properties

CAS No. :	658-79-7
Formula:	C11H14N2O4
Molecular Weight:	238.24
Storage:	Store at low temperature,Keep away from moisture Powder: -20°C for 3 years | In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.

Biological Description

Description	Glycyltyrosine is a synthetic dipeptide used as a food additive for tyrosine supplementation and acts as an inhibitor of Solute carrier family 15 member 2.
Targets(IC50)	Amino Acids and Derivatives
In vitro	Methods: Taking Glycyltyrosine as the research object, its molecular structure and in vivo metabolic characteristics were analyzed, and its application value and metabolic regulatory role as an exogenous tyrosine supplement in parenteral nutrition were explored. Results: Glycyltyrosine is a natural tyrosine-containing dipeptide and can be used as an efficient tyrosine supplement for parenteral nutritional support. It can be rapidly hydrolyzed in vivo to release free tyrosine, steadily maintain tyrosine homeostasis in plasma and tissues, optimize systemic nitrogen metabolic balance, and thereby exert a role in promoting body growth and development [2].

Solubility Information

Solubility	DMSO: Soluble, H2O: 28 mg/mL (117.53 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.1974 mL	20.9872 mL	41.9745 mL
5 mM	0.8395 mL	4.1974 mL	8.3949 mL
10 mM	0.4197 mL	2.0987 mL	4.1974 mL
50 mM	0.0839 mL	0.4197 mL	0.8395 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

Stehle P, et al., Parenteral glycyl-L-tyrosine maintains tyrosine pools and supports growth and nitrogen balance in phenylalanine-deficient rats. J Nutr. 1996 Mar;126(3):663-7.

Rees DC, et al. Binding of ligands to the active site of carboxypeptidase A. Proc Natl Acad Sci U S A. 1981;78(9): 5455-5459

Uchiho Y, Goto Y, Kamahori M, Aota T, Morisaki A, Hosen Y, Koda K. Far-ultraviolet absorbance detection of sugars and peptides by high-performance liquid chromatography. J Chromatogr A. 2015 Dec 11;1424:86-91. doi: 10.1016 /j.chroma.2015.11.006. Epub 2015 Nov 10. PubMed PMID: 26596871.

Zheng L, Zhao M, Xiao C, Zhao Q, Su G. Practical problems when using ABTS assay to assess the radical-scavenging activity of peptides: Importance of controlling reaction pH and time. Food Chem. 2016 Feb 1;192:288-94. doi: 10.1016/j.foodchem.2015.07.015. Epub 2015 Jul 6. PubMed PMID: 26304349.