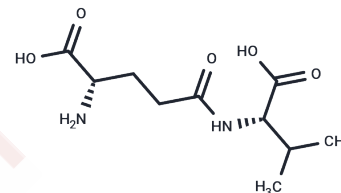


γ -Glutamylvaline

Chemical Properties

CAS No. :	2746-34-1
Formula:	C ₁₀ H ₁₈ N ₂ O ₅
Molecular Weight:	246.26
Storage:	Keep away from moisture 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	γ -Glutamylvaline acts as an activator of the calcium-sensing receptor (CaSR) and possesses anti-inflammatory biological activity. It inhibits TNF- α -mediated proinflammatory cytokine synthesis and upregulates Wnt5a expression. By activating the CaSR signaling pathway in 3T3-L1 mouse adipocytes, it improves the chronic low-grade inflammatory state.
Targets(IC50)	CaSR, TNF, Wnt/beta-catenin

Solubility Information

Solubility	H ₂ O: 80 mg/mL (324.86 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.0607 mL	20.3037 mL	40.6075 mL
5 mM	0.8121 mL	4.0607 mL	8.1215 mL
10 mM	0.4061 mL	2.0304 mL	4.0607 mL
50 mM	0.0812 mL	0.4061 mL	0.8121 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

- Xing L, et al. γ -Glutamylvaline Prevents Low-Grade Chronic Inflammation via Activation of a Calcium-Sensing Receptor Pathway in 3T3-L1 Mouse Adipocytes. *J Agric Food Chem*. 2019 Jul 31;67(30):8361-8369.
- Suzuki H, Kato K, Kumagai H. Enzymatic synthesis of gamma-glutamylvaline to improve the bitter taste of valine. *J Agric Food Chem*. 2004 Feb 11;52(3):577-80. PubMed PMID: 14759151.
- Toelstede S, Dunkel A, Hofmann T. A series of kokumi peptides impart the long-lasting mouthfulness of matured Gouda cheese. *J Agric Food Chem*. 2009 Feb 25;57(4):1440-8. doi: 10.1021/jf803376d. PubMed PMID: 19170504.
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