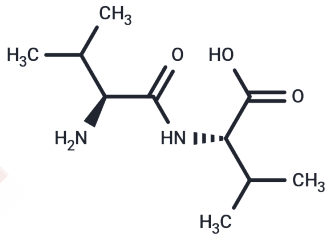
# Data Sheet (Cat.No.T20566)

TargetMol

## Valylvaline

### Chemical Properties



CAS No. : 3918-94-3

Formula: C10H20N2O3

Molecular Weight: 216.28

Storage: 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 | Valylvaline (Val-val) is a dipeptide compound that can be used for protein synthesis. |
| Targets(IC50) | Others |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 10.38 mg/mL (47.99 mM),when pH is adjusted to 3 with HCl.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween-80+45% Saline: 0.5 mg/mL (2.31 mM),Sonication is recommended.<br>*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.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 4.6236 mL | 23.1182 mL | 46.2364 mL |
| 5 mM | 0.9247 mL | 4.6236 mL | 9.2473 mL |
| 10 mM | 0.4624 mL | 2.3118 mL | 4.6236 mL |
| 50 mM | 0.0925 mL | 0.4624 mL | 0.9247 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

Okada K, et al. Synthesis and antipepsin activities of peptides having a valine or valylvaline moiety at the N-terminus. Chem Pharm Bull (Tokyo). 1979 Sep;27(9):2163-70.

Yang X, Sheng Y, Ray A, Shah SJ, Trinh HM, Pal D, Mitra AK. Uptake and bioconversion of stereoisomeric dipeptide prodrugs of ganciclovir by nanoparticulate carriers in corneal epithelial cells. Drug Deliv. 2016 Sep;23(7):2532-2540. Epub 2015 Mar 16. PubMed PMID: 25775276.

González-Castro TB, Nicolini H, Lanzagorta N, López-Narváez L, Genis A, Pool García S, Tovilla-Zárate CA. The role of brain-derived neurotrophic factor (BDNF) Val66Met genetic polymorphism in bipolar disorder: a case-control study, comorbidities, and meta-analysis of 16,786 subjects. Bipolar Disord. 2015 Feb;17(1):27-38. doi: 10.1111/bdi.12227. Epub 2014 Jul 8. PubMed PMID: 25041243.

Takahashi N, Sato T. Preferential utilization of dipeptides by Porphyromonas gingivalis. J Dent Res. 2001 May;80(5):1425-9. PubMed PMID: 11437213.