
Product Data Sheet

Product Name: H-Tyr-Lys-OH

Cat. No.: GA22981

Chemical Properties

Cas. No. 54925-88-1

Formula $C_{15}H_{23}N_3O_4$ M.Wt 309.37

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure

Background

H-Tyr-Lys-OH is a dipeptide that can serve as a biomarker for AJH-1. H-Tyr-Lys-OH has a good binding affinity with angiotensin-converting enzyme (ACE)^[1]. Dipeptides are commonly used to study enzyme mechanisms, protein synthesis and degradation processes, and signaling pathways^[2]. H-Tyr-Lys-OH consists of two amino acid residues, tyrosine (Tyr) and lysine (Lys). Tyrosine contains a phenol group, which makes it important in protein interactions and enzyme catalysis^[3]. The side chain of lysine contains an amino group that can form hydrogen bonds with other molecules, participating in various biochemical reactions^[4].

References:

- [1] Mikolasch A, et al. Laccase-catalyzed cross-linking of amino acids and peptides with dihydroxylated aromatic compounds[J]. Amino acids, 2010, 39: 671-683.
- [2] Li M, Wei Y, Feng Z, et al. Dipeptides VL increase protein accumulation in C2C12 cells by activating the Akt-mTOR pathway and inhibiting the NF-κB pathway[J]. Food Bioscience, 2022, 45: 101493.
- [3] Radi R. Protein tyrosine nitration: biochemical mechanisms and structural basis of functional effects[J]. Accounts of chemical research, 2013, 46(2): 550-559.

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

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[4] Damodaran S. Amino acids, peptides and proteins[J]. Fennema's food chemistry, 2008, 4: 425-439.

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