H-Gly-Sar-Sar-OH

Cat. No.: HY-P4296

CAS No.: 57836-11-0

Molecular Formula: $C_8H_{15}N_3O_4$

Molecular Weight: 217.22

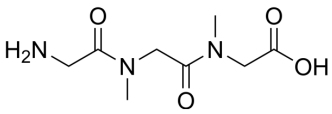
Sequence: H-Gly-Sar-Sar-OH

Sequence Shortening: G-{Sar}-{Sar}

Target: Amino Acid Derivatives

Pathway: Others

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

H-Gly-Sar-Sar-OH is an orally active tripeptide. H-Gly-Sar-Sar-OH is transported through PepT1 within Caco-2 cells. H-Gly Sar Sar OH has potential applications in material transportation[1][2][3].

In Vivo

H-Gly-Sar-Sar-OH (0.1 mM; perfusion; single dose) is insignificantly hydrolyzed (administered for 60 min) or cleared in the kidneys of Sprague-Dawley rats[2].

H-Gly-Sar-Sar-OH (10 mg/kg; p.o.; single dose) shows stability in spontaneously hypertensive rats (SHRs)[3].

Pharmacokinetic (PK) parameters of H-Gly-Sar-Sar-OH in SHRs[3]

Week old	C_{max} (nmol/mL, plasma)	T_{max} (min)	$AUC_{0\text{-}90\ min}$ (nmol•min/mL, plasma)	$T_{1/2}$ (min)
8	4.6±0.6	30	258.0±32.1	75
40	10.7±1.5	30	621.0±86.3	83

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Sprague-Dawley rats (350 g)[2].
Dosage:	0.1 mM.
Administration:	Perfusion (kidney); single dose.
Result:	Showed stability.

Animal Model:	Male SHRs (8 and 40 week-old)[3].
Dosage:	10 mg/kg.

Administration:	Oral gavage; single dose.
Result:	Detected in full form.

REFERENCES

[1]. Hong SM, et al. Structural Design of Oligopeptides for Intestinal Transport Model. J Agric Food Chem. 2016 Mar 16;64(10):2072-9.

[2]. Minami H, et al. Oligopeptides: mechanism of renal clearance depends on molecular structure. Am J Physiol. 1992 Jul;263(1 Pt 2):F109-15.

[3]. Hanh VT, et al. Effect of Aging on the Absorption of Small Peptides in Spontaneously Hypertensive Rats. J Agric Food Chem. 2017 Jul 26;65(29):5935-5943.

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