PRODUCT INFORMATION



MEN10376

Item No. 31142

CAS Registry No.: 135306-85-3

Formal Name: L-α-aspartyl-L-tyrosyl-D-

tryptophyl-L-valyl-D-tryptophyl-

D-tryptophyl-L-lysinamide

Synonyms: DYWVWWK-NH₂,

Asp-Tyr-Trp-Val-Trp-Trp-Lys-NH₂

MF: $C_{57}H_{68}N_{12}O_{10}$ FW: 1,081.2

Purity: ≥98% UV/Vis.: λ_{max} : 222 nm A crystalline solid Supplied as:

-20°C Storage: ≥4 years Stability:

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

MEN10376 is supplied as a crystalline solid. A stock solution may be made by dissolving the MEN10376 in the solvent of choice, which should be purged with an inert gas. MEN10376 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of MEN10376 in these solvents is approximately

MEN10376 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, MEN10376 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. MEN10376 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

MEN10376 is a peptide neurokinin-2 (NK₂) receptor antagonist. It inhibits contractions induced by neurokinin A (NKA) in endothelium-deprived isolated rabbit pulmonary artery (pA2 = 8.08), which is endogenously enriched in NK $_2$ receptors. It is selective for NK $_2$ receptors in isolated rabbit pulmonary artery over NK₂ receptors in isolated hamster trachea (pA₂ = 5.64 using NKA as an agonist) and NK₁ receptors in isolated guinea pig ileum (p A_2 = 5.66 using substance P methyl ester as an agonist), tissues that highly express these respective receptors, as well as NK_3 receptors in isolated guinea pig cerebral cortex membranes $(K_i = >10 \mu M)$. In vivo, MEN10376 (1 and 3 μ mol/kg) inhibits increases in bladder motility induced by the NK₂ receptor agonist [β-Ala⁸]-NKA(4-10) in anesthetized rats, as well as [β-Ala⁸]-NKA(4-10)-induced increases in bronchoconstriction in anesthetized guinea pigs.

Reference

1. Maggi, C.A., Giuliani, S., Ballati, L., et al. In vivo evidence for tachykininergic transmission using a new NK-2 receptor-selective antagonist, MEN 10,376. J. Pharmacol. Exp. Ther. 257(3), 1172-1178 (1991).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 12/31/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM