

Data Sheet

Product Name: Neurokinin A(4-10) (TFA)

Cat. No.: CS-0092588

Molecular Formula: C₃₆H₅₅F₃N₈O₁₂S

Molecular Weight: 880.93

Target: Neurokinin Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Solubility: H2O: 0.67 mg/mL (0.76 mM; Need ultrasonic)

BIOLOGICAL ACTIVITY:

Neurokinin A (4-10) TFA is a **tachykinin NK₂ receptor** agonist^[1]. IC50 & Target: NK₂ receptor^[1] **In Vitro:** Neurokinin A (NKA) and its truncated form NKA(4-10) are potent spasmogens of human colon circular muscle, an action mediated exclusively via tachykinin NK₂ receptors. A structure-activity study of the neurokinin A (NKA) fragment NKA(4-10) is performed to investigate the importance of amino acid residues for receptor efficacy, potency and affinity at the NK₂ receptor in human colon circular muscle. A high density of NK₂ receptors has been demonstrated in this tissue, using in vitro autoradiography and radioligand binding^[1].

References:

[1]. Warner FJ, et al. Structure-activity relationship of neurokinin A(4-10) at the human tachykinin NK(2) receptor: the effect of amino acid substitutions on receptor affinity and function. Biochem Pharmacol. 2002 Jun 15;63(12):2181-6.

CAIndexNames:

Neurokinin A(4-10) (TFA)

SMILES:

 $\begin{aligned} & \text{CSCC[C@@H](C(N)=O)NC([C@H](CC(C)C)NC(CNC([C@H](C(C)C)NC([C@H](CC1=CC=CC=C1)NC([C@H](CO)NC([C@H](CC(O)=O)N)=O)=O)=O) } \\ & = O) = O.OC(C(F)(F)F) = O \end{aligned}$

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

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