Data Sheet (Cat.No.T35598)

TargetMol

Neuromedin U-25 (human) (trifluoroacetate salt)

Chemical Properties

CAS No. :

Formula:

Molecular Weight:

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	Neuromedin U (NMU) is a neuropeptide first demonstrated to drive smooth muscle contraction.1Translated as a 174 amino acid propeptide, NMU is cleaved to different lengths in different animals. It has diverse receptor-mediated rolesin vivo, as it regulates feeding, vasoconstriction, nociception, and bone remodeling and contributes to obesity, cancer and septic shock.2,2NMU-25 is the active form of NMU in humans. It binds with high affinity to receptors on human left ventricle and coronary artery (KDs = 0.26 and 0.11 nM, respectively), eliciting endothelium-independent vasoconstriction. 3NMU-25 also suppresses glucose-stimulated insulin secretion in human islets, and this effect is lost in NMU R165W mutants, resulting in early-onset obesity.4

Solubility Information

Solubility	DMF: 5 mg/mL,Sonication is recommended. DMSO: 1 mg/mL,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Reference

Mitchell, J.D., Maguire, J.J., and Davenport, A.P.Emerging pharmacology and physiology of neuromedin U and the structurally related peptide neuromedin SBritish Journal of Pharmacology15887-103(2009)

Greenwood, H.C., Bloom, S.R., and Murphy, K.G.Peptides and their potential role in the treatment of diabetes and obesityRev.Diabet.Stud.8(3)355-368(2011)

Mitchell, J.D., Maguire, J.J., Kuc, R.E., et al.Expression and vasoconstrictor function of anorexigenic peptides neuromedin U-25 and S in the human cardiovascular systemCardiovascular Research81353-361(2009)

Alfa, R.W., Park, S., Skelly, K.R., et al.Suppression of insulin production and secretion by a decretin hormoneCell Metabolism21(2)323-333(2015)

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481