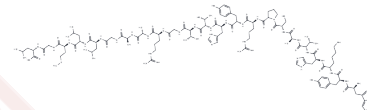


Neuropeptide W-23(human)

Chemical Properties

CAS No. :	383415-79-0
Formula:	C119H183N35O28S
Molecular Weight:	2584.01
Storage:	Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Neuropeptide W-23(human) (NPW-23) is an endogenous ligand for NPBW1 and NPBW2.
Targets(IC50)	Others,Neuropeptide W
In vitro	NPW-23 increases the I _{Ca,L} in transfected human embryonic kidney 293 cells and VSMCs via GPR7 which may involve in the development of vascular hypertension. NPW-23 increases the expression of pan phospho-PKC, intracellular diacylglycerol level, and the second messenger catalyzed by PLC[1].
In vivo	NPW-23 increases pressure-induced vasotone of the rat mesenteric arteries. Importantly, the expression of NPW is decreased in the hypertensive rats[1]. NPW-23 (0.3 nmol, 1.0 nmol, and 3.0 nmol) induces significant increases in mean arterial pressure (MAP) in conscious, freely moving male rats. Rats that receive either 1.0 or 3.0 nmol NPW-23 demonstrate a significant increase in total activity, ambulatory activity, and duration of stereotypy. NPW-23 fails to elevate MAP in rats pretreated with phentolamine. NPW-23-induced increases in total activity, ambulatory activity, and duration of stereotypy are reduced significantly by pretreatment with the orexin type 1 receptor (OX1R) antagonist, SB-408124 which suggests that orexin neurons are downstream targets of NPW [2].

Solubility Information

Solubility	H ₂ O: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.387 mL	1.935 mL	3.870 mL
5 mM	0.0774 mL	0.387 mL	0.774 mL
10 mM	0.0387 mL	0.1935 mL	0.387 mL
50 mM	0.0077 mL	0.0387 mL	0.0774 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Ji L, et al. Modulation of CaV1.2 calcium channel by neuropeptide W regulates vascular myogenic tone via G protein-coupled receptor 7. *J Hypertens*. 2015 Dec;33(12):2431-42.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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