Product Data Sheet

Product Name: Neuropeptide W-30 (rat) acetate
Cat. No.: GC81729

Chemical Properties

Cas. No.			
Formula	$C_{165}H_{249}N_{49}O_{38}S{\cdot}xC_2H_4O_2$	M.Wt	3559.11
Solubility	H_2O: 50 mg/mL (Need ultrasonic)	Storage	Sealed storage, away from moisture
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Trp-Tyr-Lys-His-Val-Ala-Ser-Pro-Arg-
Tyr-His-Thr-Val-Gly-Arg-Ala-Ser-Gly-
Leu-Leu-Met-Gly-Leu-Arg-Arg-Ser-Pro-
Tyr-Leu-Trp (acetate salt)

Background

Neuropeptide W-30 (rat) is an important stress mediator in the central nervous system that modulates the hypothalamus-pituitary-adrenal (HPA) axis and sympathetic outflow. Neuropeptide W-30 (rat) is an endogenous ligand for the two structurally related orphan G-protein-coupled receptors (GPCRs) GPR7 and GPR8. NPW-30 activates and binds to both GPR7 and GPR8 at similar effective

doses [1] [2] [3].

In Vivo, The i.c.v. administration of Neuropeptide W-30 changes secretion of anterior pituitary hormones, such as prolactin and growth hormone, and behavior, such as feeding and drinking[1].

References:
[1]. Makoto Kawasaki, et al. Centrally administered neuropeptide W-30 activates magnocellular neurosecretory cells in the supraoptic and paraventricular nuclei with neurosecretion in rats. J Endocrinol. 2006 Aug;190(2):213-23.
[2]. Nan-Shou Yu, et al. Effects of intracerebroventricular administration of neuropeptide W30 on neurons in the hypothalamic paraventricular nucleus in the conscious rat. Neurosci Lett. 2007 Mar 26;415(2):140-5.
[3]. Yukio Shimomura, et al. Identification of neuropeptide W as the endogenous ligand for orphan G-protein-coupled receptors GPR7 and GPR8. J Biol Chem. 2002 Sep 27;277(39):35826-32.