
Product Data Sheet

Product Name: Neuropeptide S (human) (trifluoroacetate salt)

Cat. No.: GC44380

Chemical Properties

Cas. No.

Formula $C_{93}H_{155}N_{31}O_{28}S \cdot XCF_3COOH$ M.Wt 2187.5

Solubility Soluble in DMSO Storage Store at -20°C

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

Background

Neuropeptide S is a neuropeptide expressed in the brain, primarily in glutamatergic neurons near the locus coeruleus and in the trigeminal sensory nucleus, as well as in neurons of the lateral parabrachial nucleus in rat brain. It is an agonist of the neuropeptide S receptor (NPSR) with an EC₅₀ value of 9.4 nM for the human peptide to induce intracellular calcium mobilization in HEK293 cells expressing the human receptor. Neuropeptide S (0.1-1 nmol), administered either intracerebroventricularly or into the paraventricular nucleus (PVN) of the hypothalamus, increases plasma adrenocorticotrophic hormone (ACTH) and corticosterone levels in rats. Administration into the PVN also decreases food intake in the hour following doses of 0.1, 0.3, and 1 nmol. Neuropeptide S decreases anxiety-like and fear behaviors in rodents, decreasing defensive burying in rats, increasing the time mice spend in the open arms of the elevated plus maze, and enhancing contextual fear extinction in mice.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA