

PRODUCT INFORMATION



Neuropeptide Y (porcine, bovine) (trifluoroacetate salt)

Item No. 36715

Formal Name: L-tyrosyl-L-prolyl-L-seryl-L-lysyl-L-prolyl-L- α -aspartyl-L-asparaginyll-L-prolylglycyl-L- α -glutamyl-L- α -aspartyl-L-alanyl-L-prolyl-L-alanyl-L- α -glutamyl-L- α -aspartyl-L-leucyl-L-alanyl-L-arginyl-L-tyrosyl-L-tyrosyl-L-seryl-L-alanyl-L-leucyl-L-arginyl-L-histidyl-L-tyrosyl-L-isoleucyl-L-asparaginyll-L-leucyl-L-isoleucyl-L-threonyl-L-arginyl-L-glutaminyll-L-arginyl-L-tyrosinamide, trifluoroacetate salt
Synonym: NPY (porcine, bovine)

Peptide Sequence: YPSKPDNPGEDAPAEDLARYYSALRHYINLITRQRY-NH₂

MF: C₁₉₀H₂₈₇N₅₅O₅₇ • XCF₃COOH

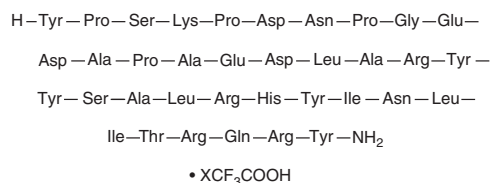
FW: 4,253.7

Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Neuropeptide Y (NPY) (porcine, bovine) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the NPY (porcine, bovine) (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. NPY (porcine, bovine) (trifluoroacetate salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of NPY (porcine, bovine) (trifluoroacetate salt) in ethanol is approximately 2 mg/ml and approximately 30 mg/ml in DMSO and DMF.

NPY (porcine, bovine) (trifluoroacetate salt) is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

NPY is a neuropeptide involved in appetite, vasoconstriction, cardiac contractility, and intestinal secretion and an agonist of the NPY receptors Y₁, Y₂, and Y₅.^{1,2} It is expressed throughout the body. NPY selectively inhibits forskolin-induced cAMP accumulation in L-M(TK-) cells expressing rat Y₁ or Y₂ and HEK293 cells expressing rat Y₅ over L-M(TK-) cells expressing rat Y₄ receptors (EC₅₀s = 0.15, 2.7, 0.66, and >1,000 nM, respectively).² It increases perfusion pressure in isolated guinea pig heart (EC₃₀ = 1.3 nM).³ Intracerebroventricular administration of NPY (300 pmol/animal) increases food intake in rats.²

References

1. Balasubramaniam, A. Neuropeptide Y family of hormones: Receptor subtypes and antagonists. *Peptides* **18**(3), 445-457 (1997).
2. Gerald, C., Walker, M.W., Criscione, L., *et al.* A receptor subtype involved in neuropeptide-Y-induced food intake. *Nature* **382**(6587), 168-171 (1996).
3. Rioux, F., Bachelard, H., Martel, J.-C., *et al.* The vasoconstrictor effect of neuropeptide Y and related peptides in the guinea pig isolated heart. *Peptides* **7**(1), 27-31 (1986).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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