

PRODUCT INFORMATION

Neuropeptide Y (3-36) (human, rat) (trifluoroacetate salt)

Item No. 24713

Synonym:	NPY (3-36) (human, rat)	H-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu-Asp-Ala-
MF:	$C_{175}H_{269}N_{53}O_{54}S \cdot XCF_3COOH$	Pro-Ala-Glu-Asp-Met-Ala-Arg-Tyr-Tyr-Ser-
FW:	4,011.4	Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-
Purity:	≥95%	Arg-Gln-Arg-Tyr-NH ₂
Supplied as:	A lyophilized powder	• XCF ₃ COOH
Storage:	-20°C	
Stability:	≥2 years	

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

Laboratory Procedures

Neuropeptide Y (NPY) (3-36) (human, rat) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the NPY (3-36) (human, rat) (trifluoroacetate salt) in water. The solubility of NPY (3-36) (human, rat) (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

NPY (3-36) is a C-terminal fragment of NPY, a neuropeptide involved in controlling appetite, blood pressure, cardiac contractility, and intestinal secretion.¹ NPY (3-36) is an endogenous peptide produced by cleavage of NPY by dipeptidyl peptidase 4 (DPP-4).^{2,3} It binds selectively to the NPY receptor Y₂ (K_i = 0.41 nM in CHP 234 cells) over the Y₁ receptor, where it does not bind at concentrations up to 1 μM. NPY (3-36) (0.1 nM) increases migration of human umbilical vein endothelial cells (HUVECs) by 80% after 12 hours in an *in vitro* wound closure assay.⁴ NPY (3-36) corresponds to residues 3-36 of the human and rat protein sequence.

References

1. Balasubramaniam, A. Neuropeptide Y family of hormones: Receptor subtypes and antagonists. *Peptides* **18**(3), 445-457 (1997).
2. Grandt, D., Schimiczek, M., Rascher, W., *et al.* Neuropeptide Y 3-36 is an endogenous ligand selective for Y₂ receptors. *Regul. Pept.* **67**(1), 33-37 (1996).
3. Medeiros, M.d.S. and Turner, A.J. Metabolism and functions of neuropeptide Y. *Neurochem. Res.* **21**(9), 1125-1132 (1996).
4. Ghersi, G., Chen, W.-T., Lee, E.W., *et al.* Critical role of dipeptidyl peptidase IV in neuropeptide Y-mediated endothelial cell migration in response to wounding. *Peptides* **22**(3), 453-458 (2001).

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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