

# DATASHEET

## Neuropeptide Y (human,rat)


### Product overview

<b>Name</b>	Neuropeptide Y (human,rat)
<b>Cat No</b>	HB2935
<b>Biological description</b>	<p>Neuropeptide Y (NPY) is a 36-amino acid endogenous neuropeptide which is involved in a variety of physiological and homeostatic processes. It is widely distributed in the CNS and is one of the most abundant peptides found in the brain. It is also distributed in the PNS.</p> <p>The NPY neuropeptide is active in vivo and has been shown to be involved in obesity and food intake, stress, anxiety, depression, epilepsy, pain, neurodegeneration and cardiovascular regulation.</p>
<b>Alternative names</b>	NPY is a potent orexigenic peptide which stimulates food intake.
<b>Biological action</b>	NPY
<b>Purity</b>	Activator
<b>Description</b>	>95%
	Widely distributed endogenous neuropeptide

### Solubility & Handling

<b>Storage instructions</b>	-20 °C (desiccate)
<b>Solubility overview</b>	Soluble in water (1.5 mg/ml)
<b>Important</b>	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

### Chemical Data

<b>Chemical name</b>	YPSKPDNPGEDAPAEDMARYYSALRHYINLITRQRY (Modifications: Tyr-36 = C-terminal amide)
<b>Molecular Weight</b>	4271.75
<b>Chemical structure</b>	
<b>Molecular Formula</b>	C <sub>189</sub> H <sub>285</sub> N <sub>55</sub> O <sub>57</sub> S
<b>Sequence (one letter)</b>	YPSKPDNPGEDAPAEDMARYYSALRHYINLITRQRY
<b>Sequence (three letter)</b>	Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu-Asp-Ala-Pro-Ala-Glu-Asp-Met-Ala-Arg-Tyr-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg-Gln-Arg-Tyr
<b>Modifications</b>	Modifications: Tyr-36 = C-terminal amide
<b>CAS Number</b>	90880-35-6
<b>PubChem identifier</b>	24868177
<b>SMILES</b>	CC[C@H](C)[C@@H](C(=O)N[C@@H](CC(=O)N)C(=O)N[C@@H](CC(C)C)C(=O)N[C@@H]([C@@H](C)CC)C(=O)N[C@@H]([C@@H](C)O)C(=O)N[C@@H](CCCNC(=N)N)C(=O)N[C@@H](CCC(=O)N)C(=O)N[C@@H](CCCNC(=N)N)C(=O)N[C@@H](CC1=CC=C(C=C1)O)C(=O)N[C@@H](CC2=CC=C(C=C2)O)NC(=O)[C@H](CC3=CN=CN3)NC(=O)[C@H](CCCNC(=N)N)NC(=O)[C@H](CC(C)C)NC(=O)[C@H](C)NC(=O)[C@H](CO)NC(=O)[C@H](CC4=CC=C(C=C4)O)NC(=O)[C@H](CC5=CC=C(C=C5)O)NC(=O)[C@H](CCCNC(=N)N)NC(=O)[C@H](C)NC(=O)[C@H](CCSC)NC(=O)[C@H](CC(=O)O)NC(=O)[C@H](CCC(=O)O)NC(=O)[C@H](C)NC(=O)[C@@H]6CCCN6C(=O)[C@H](C)NC(=O)[C@H](CC(=O)O)NC(=O)[C@H](CCC(=O)O)NC(=O)CNC(=O)[C@@H]7CCCN7C(=O)[C@H](CC(=O)N)NC(=O)[C@H](CC(=O)O)NC(=O)[C@@H]8CCCN8C(=O)[C@H](CCCCN)NC(=O)[C@H](CO)NC(=O)[C@@H]9CCCN9C(=O)[C@H](CC1=CC=C(C=C1)O)N
<b>InChiKey</b>	XKWCTHKJQNUFOQ-HRPSIEBRSA-N
<b>MDL number</b>	MFCD00212432
<b>Protein length</b>	36

## References

### Neuropeptide Y: an overview of central distribution, functional aspects, and possible involvement in neuropsychiatric illnesses.

Heilig et al (1990) Acta Psychiatr Scand. 82(2)

**PubMedID** [2173355](#)

### Neuropeptide Y in normal eating and in genetic and dietary-induced obesity.

Beck B, (2006) Philos Trans R Soc Lond B Biol Sci. 361(1471)

**PubMedID** [16874931](#)

### Neuropeptide Y: some viewpoints on a multifaceted peptide in the normal and diseased nervous system.

Hokfelt et al (1998) Brain Res 26(2-3)

**PubMedID** [9651513](#)

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