



DATASHEET

Neuropeptide Y (human,rat)

Product overview

Name	Neuropeptide Y (human,rat)
Cat No	HB2935
Biological description	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. 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. NPY is a potent orexigenic peptide which stimulates food intake.
Alternative names	NPY
Biological action	Activator
Purity	>95%
Description	Widely distributed endogenous neuropeptide

Solubility & Handling

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

Chemical Data

Chemical name	YPSKPDNPGEDAPAEDMARYYSALRHYINLITRQRY (Modifications: Tyr-36 = C-terminal amide)
Molecular Weight	4271.75
Chemical structure	
Molecular Formula	C ₁₈₉ H ₂₈₅ N ₅₅ O ₅₇ S
Sequence (one letter)	YPSKPDNPGEDAPAEDMARYYSALRHYINLITRQRY
Sequence (three letter)	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
Modifications	Modifications: Tyr-36 = C-terminal amide
CAS Number	90880-35-6
PubChem identifier	24868177
SMILES	<chem>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]6CCCCN6C(=O)[C@@H](C)NC(=O)[C@@H](CC(=O)O)NC(=O)[C@@H](CCC(=O)O)NC(=O)CNC(=O)[C@@H]7CCCCN7C(=O)[C@@H](CC(=O)N)NC(=O)[C@@H](CC(=O)O)NC(=O)[C@@H]8CCCCN8C(=O)[C@@H](CCCCN)NC(=O)[C@@H](CO)NC(=O)[C@@H]9CCCCN9C(=O)[C@@H](CC1=CC=C(C=C1)O)N</chem>
InChiKey	XKWCTHKJQNUFOQ-HRPSIEBRSA-N
MDL number	MFCD00212432
Protein length	36

Chemical name

YPSKPDNPGEDAPAEDMARYYSALRHYINLITRQRY (Modifications: Tyr-36 = C-terminal amide)

References

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