

## Recombinant Human NPY

Cat. No. NPY-29655TH Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant full length Human Neuropeptide Y with a proprietary tag; predicted MWt 36.74 kDa including the tag.
<b>Species</b>	Human
<b>Source</b>	Wheat Germ
<b>ProteinLength</b>	97 amino acids
<b>Description</b>	This gene encodes a neuropeptide that is widely expressed in the central nervous system and influences many physiological processes, including cortical excitability, stress response, food intake, circadian rhythms, and cardiovascular function. The neuropeptide functions through G protein-coupled receptors to inhibit adenylyl cyclase, activate mitogen-activated protein kinase (MAPK), regulate intracellular calcium levels, and activate potassium channels. A polymorphism in this gene resulting in a change of leucine 7 to proline in the signal peptide is associated with elevated cholesterol levels, higher alcohol consumption, and may be a risk factor for various metabolic and cardiovascular diseases.
<b>Molecular Weight</b>	36.740kDa inclusive of tags
<b>Tissue specificity</b>	One of the most abundant peptides in the nervous system. Also found in some chromaffin cells of the adrenal medulla.
<b>Biological activity</b>	useful for Antibody Production and Protein Array

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<b>Form</b>	Liquid
<b>Purity</b>	Proprietary Purification
<b>Storage buffer</b>	pH: 8.00 Constituents: 0.79% Tris HCl, 0.31% Glutathione Note: Glutathione is reduced
<b>Storage</b>	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.
<b>Sequences of amino acids</b>	MLGNKRLGLSGLTLALSLLVCLGALAEAYPSKPDNPGEDAPAEDMARYYSALRHYIN LITRQRYGKRSSPETLISDLLMRESTENVPRTRLEDPAMW
<b>Sequence Similarities</b>	Belongs to the NPY family.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	NPY neuropeptide Y [ Homo sapiens ]
<b>Official Symbol</b>	NPY
<b>Synonyms</b>	NPY; neuropeptide Y; pro-neuropeptide Y; PYY4;
<b>Gene ID</b>	4852
<b>mRNA Refseq</b>	NM_000905
<b>Protein Refseq</b>	NP_000896
<b>MIM</b>	162640
<b>Uniprot ID</b>	P01303

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<b>Chromosome Location</b>	7p15.3
<b>Pathway</b>	Adipocytokine signaling pathway, organism-specific biosystem; Adipocytokine signaling pathway, conserved biosystem; Class A/1 (Rhodopsin-like receptors), organism-specific biosystem; G alpha (i) signalling events, organism-specific biosystem; GPCR downstream signaling, organism-specific biosystem;
<b>Function</b>	G-protein coupled receptor activity; G-protein coupled receptor binding; calcium channel regulator activity; neuropeptide Y receptor binding; neuropeptide hormone activity;

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