ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Neuropeptide Y (NPY), NPY3-36 and NPY13-36

Cat. # NPY52-P	Human Neuropeptide Y (NPY) amide (1-36 aa)	**SIZE**: 500 ug
Cat. # NPY65-P	Human Neuropeptide Y (NPY) amide (3-36 aa)	**SIZE**: 500 ug
Cat. # NPY75-P	Human Neuropeptide Y (NPY) amide (13-36 aa)	**SIZE**: 500 ug

Neuropeptide Y (**NPY**), a neuropeptide colocalized and abundantly released with the neurotransmitter norepinephrine in nervous system, synthesized by postnatal olfactory epithelium of sustentacular cells. It promotes the proliferation of postnatal neuronal precursor cells and exhibits a diverse range of important physiologic activities, including effects on psychomotor activity, food intake, regulation of central endocrine secretion, and potent vasoactive effects on the cardiovascular system.

NPY precursor is a 97-aa peptide in mouse, human (chr 7p15.1) and 98-aa in rat has a mol. wt of 11kD. The precursor contains a 28-aa signal peptide, 29-64 (active processed NPY peptide) followed by the C-flanking peptide of NPY. NPY shows sequence homology to Peptide YY (PYY) and over 50% homology in amino acid and nucleotide sequence to Pancreatic Polypeptide (PNP or PPY), all of these homologous peptides has a 36-aa mature peptide characterized by a hairpin loop.

Cat. # NPY52-P (1-36)

Sequence
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-NH2
Purity: >95%
Mol Wt: 4278.8
Formula: $C_{189}H_{285}N_{55}O_{57}S_1$
Form: Powder

Cat. # NPY65-P (NPY 3-36)

Sequence
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-NH2
Purity: >95%
Mol Wt: 4011.5
Formula:C175H269N53O54S1
Form: Powder

Cat. # NPY75-P (NPY 13-36)

Sequence:
Pro-Ala-Glu-Asp-Met-Ala-Arg-Tyr-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg-Gln-Arg-Tyr-NH2

Purity: >95%
Mol Wt: 3000.5
Formula: C134H207N41O36S1
Form: Powder
Solubility: Soluble in water at 1 mg/ml

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.
Shipping: 4oC for solutions and room temp for powder.

General References: Hansel D. E et al (2001) Nature 410: 940-943; Thiele, T. E et al (1998) Nature 396: 366-369; Maccarrone C. D et al (1986) Neurochem. Int 8: 13-22; Gerald FDiBona (2002) Am J. Physiol Regulatory Integrative Comp Physiol 282: 635-36 (review).

*This product is for In vitro research use only.

Related material available from ADI

Antibodies for PPY, PYY, and NPY receptors Y1-Y6.

NPY52-65-75-P 80109A

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, San Antonio, TX 78244, USA; **Email**: service@4adi.com
☎ (800) 786-5777; (210) 561-9515; **Fax**: (210) 561-9544; **Web Site**: www.4adi.com