Recombinant Human NPY Protein(Trx Tag)

Catalog Number: PDEH100454

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	E.coli-derived Human NPY protein Pro30-Trp97, with an N-terminal Trx
Calculated MW	27.3 kDa
Observed MW	31 kDa
Accession	P01303
Bio-activity	Not validated for activity
Properties	
Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5%
	Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of
	0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Human NPY proteins, 2µg/lane of Recombinant Human NPY proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 31 kDa

Background

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NPY (Neuropeptide Y) is a Protein Coding gene. 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. NPY is a neuromodulator that is widely expressed throughout the central nervous system (CNS) and is consecrated with classic neurotransmitters including GABA and glutamate. NPY/Agouti-related protein (AgRP) neurons in the arcuate nucleus of the hypothalamus are part of a neuroendocrine feedback loop that regulates feeding behavior and glucose homeostasis. NPY/AgRP neurons sense peripheral signals (including the hormones leptin, insulin, and ghrelin) and integrate those signals with inputs from other brain regions.