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Recombinant Rat Ngf protein (His Tag)

Catalog Number: PDER100198

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

Description	
Species	Rat
Source	E.coli-derived Rat Ngf protein Ser122-Gly241, with an N-terminal His
Calculated MW	13.1 kDa
Observed MW	15 kDa
Accession	P25427
Bio-activity	Not validated for activity
Properties	
Purity	> 85% 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 Rat Ngf proteins, 2µg/lane of Recombinant Rat Ngf proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 15 KD.

Background

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Nerve growth factor (NGF) is important for the development and maintenance of the sympathetic and sensory nervous systems. NGF protein was identified as a large complex consisting of three non-covalently linked subunits, α , β , and γ , among which, the β subunit, called β -NGF (beta-NGF), was demonstrated to exhibits the growth-stimulating activity of NGF protein. NGFB/beta-NGF gene is a member of the NGF-beta family and encodes a secreted protein that homodimerizes and is incorporated into a larger complex. NGF protein acts via at least two receptors on the surface of cells (TrkA and p75 receptors) to regulate neuronal survival, promote neurite outgrowth, and up-regulate certain neuronal functions such as mediation of pain and inflammation. Also, previous studies indicated that NGF may also have an important role in the regulation of the immune system.