

## Recombinant Rat Ngf protein (His Tag)

**Catalog Number: PDER100198**

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

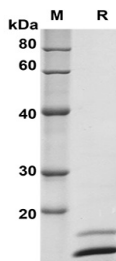
### Description

<b>Species</b>	Rat
<b>Source</b>	E.coli-derived Rat Ngf protein Ser122-Gly241, with an N-terminal His
<b>Mol_Mass</b>	13.1 kDa
<b>Accession</b>	P25427
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 85% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 10 EU/mg of the protein as determined by the LAL method
<b>Storage</b>	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°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
<b>Reconstitution</b>	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

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,  $\alpha$ ,  $\beta$ , and  $\gamma$ , among which, the  $\beta$  subunit, called  $\beta$ -NGF (beta-NGF), was demonstrated to exhibit 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.

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