Active Recombinant Rat NGF protein, His-tagged

Cat. No. NGF-5211R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Rat NGF protein(P25427)(19~241 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Rat
Source	E.coli
ProteinLength	19-241 aa
Form	Lyophilized from sterile 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	Nerve Growth Factor (NGF) is the archetypal neurotrophin of a family of polypeptides .It has long occupied a critical role in developmental and adult neurobiology for its many important regulatory functions on the survival, growth and differentiation of nerve cells in the peripheral and central nervous system.NGF selectively binds NTRK1, triggering receptor dimerization, autophosphorylation, and activation of downstream pathways (e.g., MAPK, PI3K-Akt), promoting neuronal survival and differentiation.Thus a functional ELISA assay was conducted to detect the interaction of recombinant rat NGF and recombinant human NTRK1. Briefly, NGF was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to NTRK1-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-NGF pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at

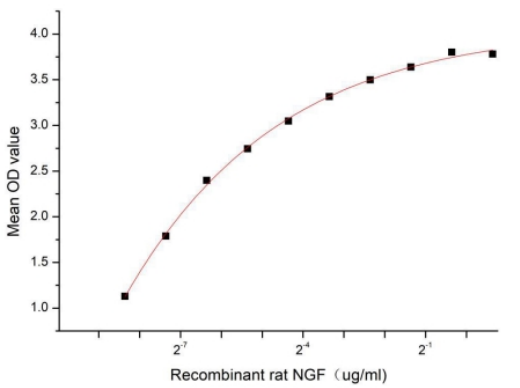
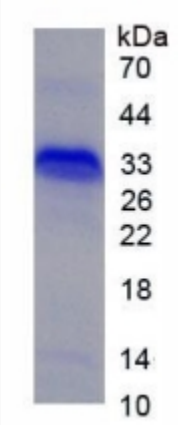
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	37°C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µ stop solution to the wells and read at 450/630nm immediately. The binding activity of recombinant rat NGF and recombinant human NTRK1 was shown,and this effect was in a dose dependent manner.
Molecular Mass	29.8kDa
Endotoxin	<1.0EU per 1µg (determined by the LAL method).
Purity	> 90% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	Ngf nerve growth factor (beta polypeptide) [Rattus norvegicus]
Official Symbol	NGF
Synonyms	NGF; nerve growth factor (beta polypeptide); beta-nerve growth factor; beta-NGF; nerve growth factor, beta; Ngfb;
Gene ID	310738

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Activity	
SDS-PAGE	

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