


CA 1043	<b>HumanKine™ Beta NGF</b>			
	<b>Prod. No. S2301-10UG</b> <i>For Research Use Only</i> <i>Not intended for use in humans or animals</i>	<b>lot #: PR1XXXXXX XXXX</b>	Orders & Support Web	866 372-7442 support@primorigen.com www.primorigen.com

<b>Pack Size</b>	10 µg
<b>Species</b>	Human
<b>Expression System</b>	HEK 293*
	Animal-derived product free
<b>Molecular Mass</b>	13 kDa homodimer, non-glycosylated
<b>Activity</b>	Typically 1.5 to 8 ng/mL ED50
<b>Purity</b>	≥ 95%
<b>Endotoxin</b>	≤ 1 EU/µg

### Background:

Recombinant human beta NGF expressed in engineered human cells. Beta NGF is a 13 kDa non-disulfide bonded homodimeric protein and belongs to the nerve growth factor protein superfamily. Beta NGF is a key growth factor in target-mediated regulation of peripheral innervation. During development, beta NGF regulates nerve cell death, synaptic connectivity, fiber guidance and dendritic morphology. The presence of beta NGF in immune cells and endocrine cells as well as in the CNS limbic areas suggests that beta NGF may function as an intracellular messenger to regulate the body's response to stress.

Note: Representative data are shown below (not Lot-specific).

**Formulation:** Lyophilized from a 0.2 micron filtered solution in PBS.

### Reconstitution:

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile PBS containing 0.1% endotoxin-free recombinant human serum albumin.

### Storage and Stability:

Lyophilized products are stable for one year at -20°C to -80°C from date of receipt. Store only at -20°C to -80°C in working aliquots. Avoid repeated freeze-thaw cycles.

### Quality Control Testing

#### Assay:

The specific activity was determined by the dose-dependent stimulation of proliferation of the TF-1 cell line (human erythroleukemic indicator cell line).

#### Purity Confirmation:

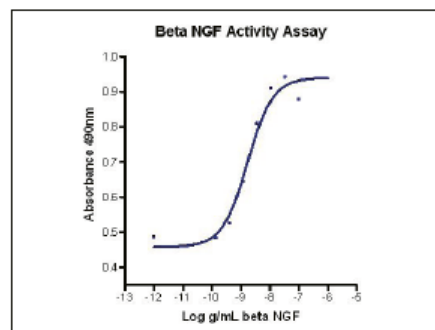
The protein was resolved by SDS-polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue.

#### References:

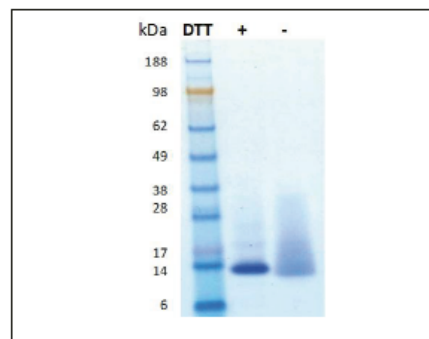
Kitamura, T., et al (1989) J. Cell Physiol. 140, 323-334  
Cirulli, F., et al (2009) Front. Neuroendo. 30, 379-395

\*All HumanKine™ cytokines are expressed in HEK 293 cells. HumanKine™ is a trademark of HumanZyme Inc.

## A. Activity Assay



## B. SDS-PAGE



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