

Recombinant Canine Nerve Growth Factor

#R00626

Size: 5 µg/100 µg/500 µg

Stability & Storage

Please use a manual defrost freezer and avoid repeated freeze-thaw cycles.

-Lyophilized protein should be stored at ≤ -20°C, stable for 12 months after receipt.

-Reconstituted protein solution can be stored at 2-8°C for 1-2 weeks.

-Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Canine/Feline Nerve Growth Factor (NGF) is composed of three non-covalently linked subunits α, β, and γ; it exhibits all the biological activities ascribed to NGF. It is structurally related to BDNF, NT-3 and NT-4 and belongs to the cysteine-knot family of growth factors that assume stable dimeric structures. β-NGF is a neurotrophic factor that signals through its receptor β-NGF, and plays a crucial role in the development and preservation of the sensory and sympathetic nervous systems. β-NGF also acts as a growth and differentiation factor for B lymphocytes and enhances B-cell survival. These results suggest that β-NGF is a pleiotropic cytokine, which in addition to its neurotropic activities may have an important role in the regulation of the immune system. Canine/Feline β-NGF shares 97% sequence similarity with human protein and shows cross-species reactivity.

AA Sequence

Ser122-Ala241, Accession #A0ABI7YSK6

Reconstitution

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Reconstitute in sterile distilled water to a concentration of 0.1-1.0 mg/mL. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Product Specification

Species	Canine
Source	CHO Cells
Molecular Weight	Recombinant Canine/Feline beta-NGF Protein, a noncovalently-linked homodimer, each subunit containing 120 amino acid residues, has a predicted molecular mass of approximately 26.8 kDa.
Purity	> 98% by SDS-PAGE gel and HPLC analyses.
Biological Activity	Determined by the dose-dependent stimulation of the proliferation of human TF-1 cells. The expected ED ₅₀ is 1.0 ng/ml, corresponding to a specific activity of 1 × 10 ⁶ units/mg.

Formulation	Lyophilized from a 0.22 µm filtered solution of in PBS. See CoA for details.
Endotoxin	Less than 0.1 EU/µg of rCa/Feβ-NGF as determined by LAL test.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
