Product Information

Purity: >95% by SDS-PAGE (combined monomeric and dimeric β-NGF).

Biological Activity: Optimal at 0.3 - 3 ng/ml.

Immunological Identity: Single band at 13 kDa (monomeric β-NGF) with minor band at 26 kDa (dimeric β-NGF) by SDS-PAGE and Western blot using Anti-NGF (2.5S).

Sequence Identity: N-terminal sequence analysis β-NGF.

Mass/vial: ≥10 µg by amino acid analysis.

Lyophilization buffer: 125 µl of 0.2 µm-filtered 20 mM sodium phosphate, pH 7.0.

Carrier Protein: None

Endotoxin: <10 endotoxin units/vial.

Reconstitution and Use

To prepare a stock solution, reconstitute the vial contents in a solution that contains 0.1-1.0% BSA or 1-10% serum in buffered saline or tissue culture media. This may be diluted to the final working concentration of NGF-β, generally 0.1 to 10 ng/ml. Additional filtration of the stock solution is not recommended and may result in product loss due to adsorption onto the filter membrane.

Storage/Stability

Prior to reconstitution store vial below 0 °C. After reconstitution, the product may be stored for two weeks at 2-8 °C or may be stored as aliquots at -20 °C. Prolonged storage of product or repeated freezing and thawing is not recommended.

Performance Characteristics

Nerve Growth Factor-β has been tested for bioactivity using 8-day chick embryo dorsal root ganglia. The product induced an optimal degree of neurite-like filament growth when ganglia were exposed to NGF-β concentrations between 0.1 and 10 ng/ml. Filament growth was not observed from ganglia without added NGF-β. The EC50 is defined as the effective concentration of growth factor that elicits a 50% increase in cell growth in a cell based bioassay.
References

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