

Recombinant Human Novel Neurtrophin-1/B-Cell Stimulating Factor-3

#R00160

Size: 10 µg/100 µg/500 µg

Stability & Storage

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

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



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

Novel Neurotrophin-1 (NNT-1) or B-Cell Stimulating Factor-3 (BSF-3), is a new member of the IL-6 family of structurally related cytokines that includes IL-6, CNTF, LIF, CT-1, IL-11 and OSM. All family members share the receptor subunit gp130 that belong to the type I cytokine receptor superfamily. Ligand binding leads to gp130 homodimerization or heterodimerization (with LIF receptor or OSM receptor beta), and induces cell signaling and functional activity. For several family members, including CNTF, IL-6, and IL-11, binding of the ligand to a specific receptor alpha subunit (CNTF R alpha, IL-6 R alpha, or IL-11 R alpha) is required prior to gp130 homo- or hetero-dimerization.

AA Sequence

LNRTGDPGPGPSIQKTYDLTRYLEHQLRSLAGTYLNY
LGPPFNEPDFNPPRLGAETLPRATVDLEVWRS�NDK
LRLTQNYEAYSHLLCYLRGLNRQAATAELRRSLAHFC

TSLQGLLGSIAGVMAALGYPLPQPLPGTEPTWTPGP
AHSDFLQKMDDFWLLKELQTLWRSKDFNRLKKK
MQPPAAVTLHLGAHGF

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	Cardiotrophin-like cytokine factor 1, BSF-3
Accession	Q9UBD9
GeneID	23529
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 22.3 kDa, a single non-glycosylated polypeptide chain containing 198 amino acids.
Purity	> 98 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using human TF-1 cells is less than 4 ng/ml, corresponding to a specific

activity of $> 2.5 \times 10^5$ IU/mg in the presence of human CNTF R alpha.

Physical Appearance Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation Lyophilized from a 0.2 μ m filtered concentrated solution in 30 % Acetonitrile and 0.1 % TFA.

Endotoxin Less than 0.1 EU/ μ g of rHuNNT-1/BCSF-3 as determined by LAL method.
