Glial Cell Line-Derived Neurotrophic Factor from rat, recombinant expressed in Sf21 insect cells

Catalog Number G1401
Storage Temperature –20 °C

Synonyms: GDNF, rrGDNF

Product Description
Glial Cell Line-Derived Neurotrophic Factor (GDNF) is a member of the TGF-β superfamily, and possesses the seven conserved cysteine residues and the ability to form disulfide-bonded homodimers that are common to all TGF-β members. GDNF is a dimer with a molecular mass of ~30 kDa and shows remarkable cross-species amino acid sequence homology, with 93% identity between rat and human GDNF.\(^1\)

GDNF promotes neuron survival in many different neuron cell types, including dopaminergic neurons,\(^2\) embryonic avian motor neurons,\(^3\) as well as autonomic motor neurons of both parasympathetic and sympathetic systems.\(^4\) In addition, exogenously applied GDNF has been shown to rescue damaged facial motor neurons \textit{in vivo}.\(^5\)

This product is lyophilized from a 0.2 µm-filtered solution of 30% acetonitrile and 0.1% trifluoroacetic acid (TFA) containing 50 µg bovine serum albumin (BSA) per 1 µg of cytokine.

The biological activity of rrGDNF is measured by its ability to bind to immobilized rrGFRα1/Fc in a functional ELISA.

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions
Reconstitute the contents of a 10 µg vial using 0.2 µm-filtered phosphate buffered saline containing at least 0.1% human serum albumin or bovine serum albumin so the concentration is ≥10 µg/ml.

Storage/Stability
Store the product at –20 °C.

After reconstitution, the product may be stored at 2-8 °C for up to 1 month. For extended storage, freeze in working aliquots at –70 °C or –20 °C. Repeated freezing and thawing is not recommended.

References

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