

RP03234

Leader in Biomolecular Solutions for Life Science



Recombinant Rat GDNF Protein

Catalog No.: RP03234 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Baculovirus-Insect Cells	25453	Q07731-1

Tags

N-His

Synonyms

GDNF;ATF;ATF1;ATF2;HFB1-GDNF;HSCR3

Product Information

Source	Purification
Baculovirus-Insect Cells	≥ 95 % as determined by SDS-PAGE.

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Supplied as a 0.22 μm filtered solution of 20 mM Tris, 500 mM NaCl, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact



www.abclonal.com

Background

Glial cell line-derived neurotrophic factor(GDNF) is an important member of the GDNF family of ligands(GFL). The GDNF family of ligands is comprised by four neurotrophic factors: glial cell line-derived neurotrophic factor (GDNF), neurturin (NRTN), artemin (ARTN), and persephin (PSPN). It has been found that GFLs play a role in a number of biological processes including cell survival, neurite outgrowth, cell differentiation and cell migration. As the founding member, GDNF plays a key role in the promotion of the survival of dopaminergic neurons. GDNF is a highly conserved neurotrophic factor. The recombinant form of this protein also promotes the survival and differentiation of dopaminergic neurons in culture, and was able to prevent apoptosis of motor neurons induced by axotomy. GDNF also regulates kidney development and spermatogenesis, and it affects alcohol consumption. It has been shown that GDNF results in two Parkinson's disease clinical trial and in a number of animal trials. It has been taken as a potent survival factor for central motoneurons.

Basic Information

Description

Recombinant Rat GDNF Protein is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Ser78-Ile211) of Rat GDNF (Accession #NP_062012.1) fused with an 6×His tag at the N-terminus.

Bio-Activity

Measured in a cell proliferation assay using SH-SY5Y human neuroblastoma cells. The ED50 for this effect is typically 10-50 ng/mL in the presence of Recombinant Rat GFR alpha1/GDNF R alpha1 His Chimera.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

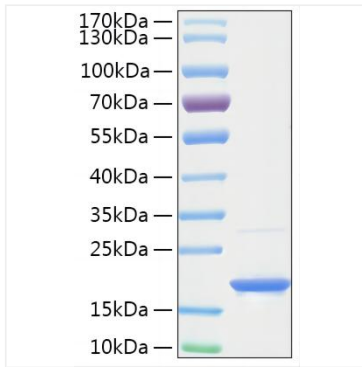
For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

Store at -70°C. This product is stable at ≤ -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature. Avoid repeated freeze-thaw cycles. Avoid repeated freeze/thaw cycles.

* For your safety and health, please wear a lab coat and disposable gloves when handling.

Validation Data



Recombinant Rat GDNF Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.