

Human GDNF Protein

Cat. No. GDF-HE001

Description

Source	Recombinant Human GDNF Protein is expressed from E.coli without tag It contains Ser78-Ile211.
Accession	P39905-1
Molecular Weight	The protein has a predicted MW of 15.06 kDa same as Bis-Tris PAGE result.
Endotoxin	Less than 0.1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Glial cell line-derived neurotrophic factor (GDNF) is a 134 amino acid protein belonging in the GDNF family ligands (GFLs). GDNF was originally isolated from rat glial cell lines and identified as a neurotrophic factor with the ability to promote dopamine uptake within midbrain dopaminergic neurons.

Assay Data

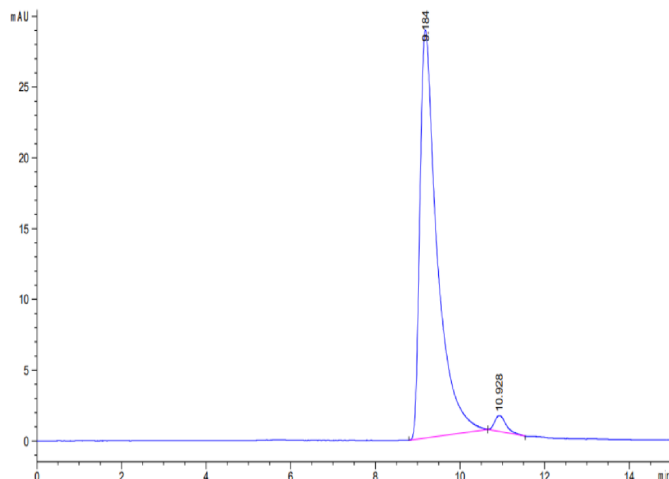
Bis-Tris PAGE



Human GDNF on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data

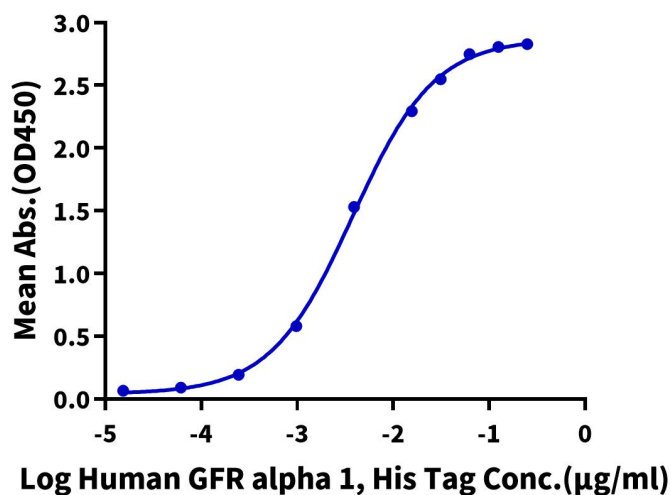


The purity of Human GDNF is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human GDNF, No Tag ELISA

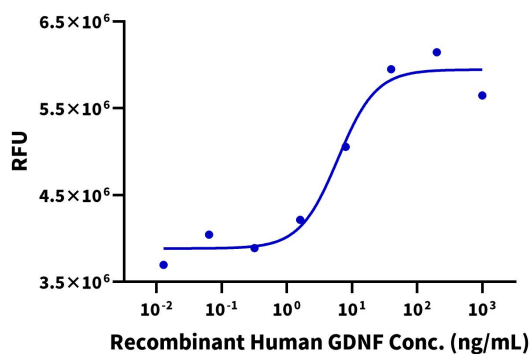
0.1µg Human GDNF, No Tag Per Well



Immobilized Human GDNF, No Tag at 1 µg/ml (100µl/well) on the plate. Dose response curve for Human GFR alpha 1, His Tag with the EC50 of 3.8ng/ml determined by ELISA (QC Test).

Cell Based Assay

Recombinant Human GDNF Bioactivity



Measured in a cell proliferation assay using SHSY5Y human neuroblastoma cells. The ED50 for this effect is 212 ng/mL in the presence of Recombinant Human GFR alpha 1/GDNF R alpha 1 Fc Chimera.