

## Product datasheet for **TP720617L**

### **GDNF (NM\_000514) Human Recombinant Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Purified recombinant protein of Human glial cell derived neurotrophic factor (GDNF), transcript variant 1
<b>Species:</b>	Human
<b>Expression Host:</b>	E. coli
<b>Expression cDNA Clone or AA Sequence:</b>	Ser78-Ile211
<b>Tag:</b>	Tag Free
<b>Predicted MW:</b>	15.1 kDa
<b>Concentration:</b>	lot specific
<b>Purity:</b>	>95% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	Provided lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 150 mM NaCl
<b>Endotoxin:</b>	Endotoxin level is < 0.1 ng/µg of protein (< 1 EU/µg)
<b>Reconstitution Method:</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Dissolve the lyophilized protein in ddH <sub>2</sub> O. It is not recommended to reconstitute a concentration less than 100 µg/ml. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for at least 6 months from date of receipt under proper storage and handling conditions.
<b>RefSeq:</b>	<a href="#">NP_000505</a>
<b>Locus ID:</b>	2668
<b>UniProt ID:</b>	<a href="#">P39905</a> , <a href="#">A0A0S2Z3V2</a>
<b>RefSeq Size:</b>	836
<b>Cytogenetics:</b>	5p13.2
<b>RefSeq ORF:</b>	633
<b>Synonyms:</b>	ATF; ATF1; ATF2; HFB1-GDNF; HSCR3



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**Summary:**

This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. The recombinant form of this protein, a highly conserved neurotrophic factor, was shown to promote the survival and differentiation of dopaminergic neurons in culture, and was able to prevent apoptosis of motor neurons induced by axotomy. This protein is a ligand for the product of the RET (rearranged during transfection) protooncogene. Mutations in this gene may be associated with Hirschsprung disease and Tourette syndrome. This gene encodes multiple protein isoforms that may undergo similar proteolytic processing. [provided by RefSeq, Aug 2016]

**Protein Families:**

Druggable Genome, Secreted Protein, Transmembrane