

## Recombinant Human GDNF

Catalog#:P02128    Derived from *E.coli*

<b>DESCRIPTION</b>	<p>Recombinant Human Glial Cell Line- Derived Neurotrophic Factor is produced by our <i>E.coli</i> expression system and the target gene encoding Ser78- Ile211 is expressed.</p> <p><b>Accession#:</b> P39905</p> <p><b>Known as:</b> Glial Cell Line- Derived Neurotrophic Factor; hGDNF; Astrocyte-Derived Trophic Factor; ATF; GDNF</p>
<b>FORMULATION</b>	Lyophilized from a 0.2 $\mu$ m filtered solution of 20mM PB, 150mM NaCl, pH 7.4.
<b>SHIPPING</b>	<p>The product is shipped at ambient temperature.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
<b>STORAGE</b>	<p>Lyophilized protein should be stored at <math>&lt;-20^{\circ}\text{C}</math>, though stable at room temperature for 3 weeks.</p> <p>Reconstituted protein solution can be stored at <math>4-7^{\circ}\text{C}</math> for 2-7 days.</p> <p>Aliquots of reconstituted samples are stable at <math>&lt;-20^{\circ}\text{C}</math> for 3 months.</p>
<b>RECONSTITUTION</b>	<p><i>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</i></p> <p><i>It is not recommended to reconstitute to a concentration less than 100<math>\mu\text{g/ml}</math>.</i></p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
<b>QUALITY CONTROL</b>	<p><b>Mol Mass:</b> 15.1kDa    <b>AP Mol Mass:</b> 17kDa, reducing conditions.</p> <p><b>Purity:</b> Greater than 95% as determined by reducing SDS-PAGE.</p> <p><b>Endotoxin:</b> Less than 0.1 ng/<math>\mu\text{g}</math> (1 EU/<math>\mu\text{g}</math>) as determined by LAL test.</p>
<b>BACKGROUND</b>	<p>Glial Cell Line-Derived Neurotrophic Factor (GDNF) is a disulfide-linked homodimeric glycoprotein that belongs to the TGF-<math>\beta</math> superfamily. It has been shown to promote the survival of various neuronal subpopulations in both the central as well as the peripheral nervous systems at different stages of their development. Human GDNF cDNA encodes a 211 amino acid residue prepropeptide that is processed to yield a dimeric protein. Mature human GDNF was predicted to contain two 134 amino acid residue subunits. Cells known to express GDNF include Sertoli cells, type 1 astrocytes, Schwann cells, neurons, pinealocytes and skeletal muscle cells. Mutations in this gene may be associated with Hirschsprung disease.</p>
<p><b>SDS-PAGE</b></p> 	