

Animal, Bacterial & Viral Free - Low Endotoxin - Ultra Pure - High BioActivity
GNDF

Recombinant Human Glial cell line Derived Neurotrophic Factor, GNDF, Endotoxin Free

Catalog No.	CRO505A CRO505B CRO505C CRO505D	Quantity:	10 µg 50 µg 1 mg 100 µg
Alternate Names:	ATF-1, ATF, astrocyte-derived trophic factor		
Description:	Glial cell line derived neurotrophic factor (GDNF) is a protein promoting the survival of various neuronal subpopulations at different stages of development. These include dopaminergic neurons in midbrain, GDNF stimulates their survival, differentiation and high-affinity dopamine uptake. The use of GDNF in the treatment of Parkinson's disease and spinal cord injuries has shown promising results. GDNF belongs to the TGF-β superfamily, it is a homodimeric protein with the familial cysteine-knot structure. Cells expressing GDNF include Sertoli cells, type 1 astrocytes, Schwann cells, neurons.		
Gene ID:	2668		
UniProtKB:	P39905		
Source:	Recombinant Human GNDF is produced in the endospore of barley grain <i>Hordeum vulgare</i> , that is void of any human or animal viral contaminants that could jeopardize stem cell culture.		
Molecular Weight:	Recombinant human GNDF contains 134 aa with 16 aa His-tag, having a predicted MW of 17.2 kDa including the His-tag. As a result of glycosylation rhGNDF migrates with an apparent MW of 25 kDa.		
Formulation:	Lyophilized from PBS, pH 7.2, sterile filtered through a 0.2 µm filter.		
Purity:	> 95% by SDS-PAGE gel analysis.		
Endotoxin Level:	Endotoxin level is less than 0.005 ng per µg (0.05 EU/µg) as measured by kinetic LAL assay.		
MAT Assay:	This GNDF product carries no pyrogenic or pro-inflammatory contaminants, as assayed with monocyte activation test using Human 10-plex Cytokine Assay measuring IL-6, TNF-alpha and IL-1beta induction.		
Biological Activity:	ED ₅₀ < 8.0 ng/ml, determined by the dose-dependent effect of rhGNDF on proliferation of rat SH-SY5Y human neuroblastoma cell line.		
Specific Activity:	> 1.3 x 10 ⁵ U/mg		
Reconstitution:	Centrifuge vial prior to opening. Reconstitute the lyophilized protein in sterile water to a concentration of no less than 100 µg/ml. The solution can be further diluted into aliquots in aqueous buffers. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please note that the addition of any carrier protein into this product may introduce endotoxin. Depending upon the particular application employed, this may be undesirable.		
Storage & Stability:	The lyophilized protein, though stable at room temperature for few weeks, is best stored at -20°C. Reconstituted protein should be used immediately or stored in working aliquots at -20°C. Avoid repeated freeze-thaw cycles.		

cellsciences.com

Animal, Bacterial & Viral Free - Low Endotoxin - Ultra Pure - High BioActivity

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



Cell Sciences®
65 Parker Street
Unit 11
Newburyport, MA 01950

Toll Free: 888-769-1246
Phone: 978-572-1070
Fax: 978-992-0298

E-mail: info@cellsciences.com
Website: www.cellsciences.com