Active Recombinant Human GDNF

Cat. No. GDNF-985H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	The recombinant human G-DNF expressed in CHO cells is disulfide-linked homo-dimer, with an apparent molecular weight of ~30.4 kDa.
Species	Human
Source	CHO
Description	Glial cell line-derived neurotrophic factor (G-DNF) is a neurotrophic factors belong to TGF-beta super family necessary for neuron survival and phenotypic maintenance in central and peripheral nervous systems. G-DNF has the potent to support the differentiation and survival of many neuron subpopulations, prominent for dopaminergic neurons and motor neurons, as well as Purkinje cells and sympathetic neurons. Sertoli cells, type 1 astrocytes, Schwann cells, neurons, pinealocytes and skeletal muscle cells are known to express GDNF in human. GDNF has shown to interact with GFRA2 and GDNF family receptor alpha 1. Mutations in this gene may be associated with Hirschsprungs disease, Parkinsons disease and amyotrophic lateral sclerosis (ALS).
Form	Lyophilized after extensive dialysis against PBS.
Bio-activity	ED50< 1="" µg/ml,="" measured="" in="" a="" cell="" proliferation="" assay="" using="" rat="" c6="" cells,="" corresponding="" to="" a="" specific="" activity="" of="">1 x 103 units/mg
Molecular Mass	30.4 kDa (homo-dimer), observed by non-reducing SDS-PAGE.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

AA Sequence	Ser78 – Ile211
Endotoxin	<0.2 eu/μg,="" determined="" by="" lal="">
Purity	>95% as analyzed by SDS-PAGE and HPLC.
Storage	Lyophilized recombinant protein remains stable up to 6 months at -80°C from date of receipt. Upon reconstitution, rhG-DNF should be stable up to 1 week at 4°C or up to 2 months at -20°C.
Reconstitution	Reconstituted in ddH2O or PBS at 100 μg/ml.

GENE INFORMATION

Gene Name	GDNF glial cell derived neurotrophic factor [Homo sapiens]
Official Symbol	GDNF
Synonyms	GDNF; glial cell derived neurotrophic factor; glial cell line-derived neurotrophic factor; astrocyte derived trophic factor; ATF1; ATF2; glial cell line derived neurotrophic factor; glial derived neurotrophic factor; HFB1 GDNF; ATF; astrocyte-derived trophic factor; HSCR3; HFB1-GDNF;
Gene ID	2668
mRNA Refseq	NM_000514
Protein Refseq	NP_000505
MIM	600837

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

UniProt ID	P39905
Chromosome Location	5p13.1-p12
Pathway	Axon guidance, organism-specific biosystem; Developmental Biology, organism-specific biosystem; NCAM signaling for neurite out-growth, organism-specific biosystem; NCAM1 interactions, organism-specific biosystem; Signaling events regulated by Ret tyrosine kinase, organism-specific biosystem;
Function	growth factor activity; protein homodimerization activity; receptor binding;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA