

DATASHEET

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GDNF, Human**Cat. No.:** Z02927-10**Size:** 10 µg**Synonyms:** Glial cell line-derived neurotrophic factor, ATF1; ATF2; HFB1-GDNF; HSCR3**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 [1]. **G-DNF** has the potent to support the differentiation and survival of many neuron subpopulations, prominent for dopaminergic neurons [2] and motor neurons [3], 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 [4]. GDNF has shown to interact with GFRA2 and GDNF family receptor alpha 1 [5,6]. Mutations in this gene may be associated with Hirschsprung's disease, Parkinson's disease and amyotrophic lateral sclerosis (ALS) [7].

The **recombinant human G-DNF** expressed in CHO cells is disulfide-linked homo-dimer, with an apparent molecular weight of ~30.4 kDa.

Amino Acid Sequence:

RGQRGKNRGC VLTAIHLNVT DLGLGYETKE ELIFRYCSGS
CDAAEITYDK ILKNLSRNRV LVSDKVGQAC CRPIAFDDDL
SFLDDNLVYH ILRKHSKRRC GCI

Source: CHO**Species:** Human**Biological 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 Weight:** 30.4 kDa (homo-dimer), observed by non-reducing SDS-PAGE.**Formulation:** Lyophilized after extensive dialysis against PBS.**Reconstitution:** Reconstituted in ddH₂O or PBS at 100 µg/ml.**Purity:** > 95% as analyzed by SDS-PAGE and HPLC.**Endotoxin Level:** <0.2 EU/µg, determined by LAL method.**Storage:** Lyophilized recombinant **human Glial cell line-derived neurotrophic factor (G-DNF)** 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.

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