

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant GDNF, Human

Catalog Number: BK0208-10 μ g

Source: CHO

Quantity: 10 μ g

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.

Molecular Weight:

30.4 kDa (homo-dimer), observed by non-reducing SDS-PAGE.

Purity:

> 95% as analyzed by SDS-PAGE and HPLC.

Biological Activity:

ED₅₀ < 1 μ g/ml, measured in a cell proliferation assay using rat C6 cells, corresponding to a specific activity of >1 x 10³ units/mg

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

RGQRGKNRGCVLTAIHLNVTDLGLGYET-
KEELIFRYCSGSCDAAETTYDKILKNLSRN-
RRLVSDKVGQAC-
CRPIAFDDDL SFLDDNLVYHILRKHSAKRCGCI

Endotoxin:

<0.2 EU/ μ g, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 μ g/ml.

Storage:

Lyophilized recombinant human Glial cell line-derived neurotrophic factor (G-DNF) remains stable up to 6 months at -80 $^{\circ}$ C from date of receipt. Upon reconstitution, rhG-DNF should be stable up to 1 week at 4 $^{\circ}$ C or up to 2 months at -20 $^{\circ}$ C.

Usage:

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