

GFH2AF Recombinant Human GDNF (Animal-Free)

Description

Glial cell-derived neurotrophic factor (GDNF) is a neurotrophic factor that signals through a multicomponent receptor system to activate receptor tyrosine kinase RET signaling. GDNF promotes dopamine uptake, prevents motor neuron apoptosis, and supports the survival and differentiation of neurons.

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

Length	135 / 270 aa
Molecular Weight	15.2 / 30.4 kDa
Source	E. coli
Accession Number	P39905
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

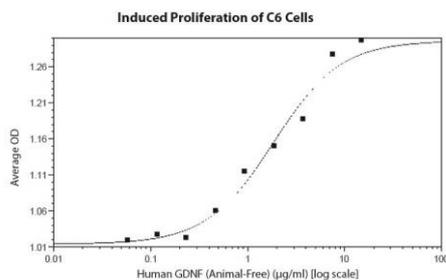
Specifications

Alternative Names	ATF, HFB1-GDNF, ATF1, ATF-1, astrocyte-derived trophic factor 2, glial cell line derived neurotrophic factor
Biological Activity	Human GDNF (Animal-Free) is fully biologically active when compared to standard. The activity is determined by a proliferation assay using C6 cells and it is typically less than 3 µg/ml. This corresponds to an expected specific activity of 3.3 x 10 ² units/mg.
Endotoxin Level	≤1.00 EU/µg as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium citrate, 100 mM sodium chloride, pH 4.0
AA Sequence	MSPDKQMAVL PRRERNRQAA AANPENSRGK GRRGQRGKNR GCVLTAIHLN VTDLGLGYET KEELIFRYCS GSCDAAETTY DKILKNLSRN RRLVSDKVGQ ACCRPIAFDD DLSFLDDNLV YHILRKHS AK RCGCI

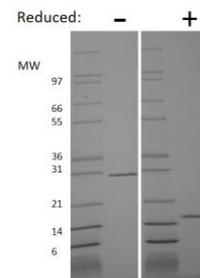
Preparation and Storage

Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
Stability and Storage	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

Data



Induced proliferation of C6 cells assay for Human GDNF. Cell proliferation was measured to calculate the ED50, which is as expected less than 3 µg/ml.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 µg of protein was loaded in each lane. Human GDNF has a predicted Mw of 30.4 kDa (each monomer is 15.2 kDa).