

## GFH2 Recombinant Human GDNF

### 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.

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

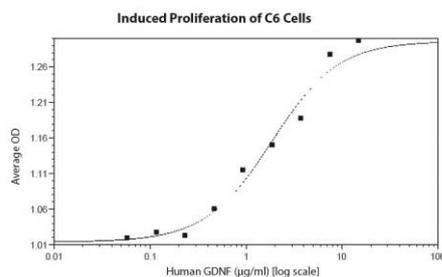
### Specifications

<b>Alternative Names</b>	ATF, HFB1-GDNF, ATF1, ATF-1, astrocyte-derived trophic factor 2, glial cell line derived neurotrophic factor
<b>Biological Activity</b>	Human GDNF 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 <sup>2</sup> units/mg.
<b>Endotoxin Level</b>	≤1.00 EU/µg as measured by kinetic LAL
<b>Formulation</b>	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium citrate, 100 mM sodium chloride, pH 4.0
<b>AA Sequence</b>	MSPDKQMAVL PRERNRQAA AANPENSRGK GRGQRGKNR GCVLTAIHLN VTDLGLGYET KEELIFRYCS GSCDAAETTY DKILKNLSRN RRLVSDKVGQ ACCRPIAFDD DLSFLDDNLV YHILRKHS AK RCGCI

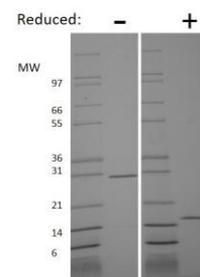
### Preparation and Storage

<b>Reconstitution</b>	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.
<b>Stability and Storage</b>	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).