

Recombinant Mouse GDNF Protein

Product Information

Product Name	Cat#	Size
Recombinant Mouse GDNF Protein	92103ES05	2 µg
	92103ES10	10 µg
	92103ES50	50 µg
	92103ES60	100 µg

Product Description

Glial cell line-derived neurotrophic factor (GDNF) is a glycosylated, disulfide-bonded homodimer that is a distantly related member of the transforming growth factor- β superfamily. It is a founding member of the GDNF family of ligands (GFL) and has been shown to interact with GFRA2 and GDNF family receptor alpha. Mature rat and human GDNF exhibit approximately 93% amino acid sequence identity and show considerable species cross-reactivity. Cells known to express GDNF include Sertoli cells, type 1 astrocytes, Schwann cells, neurons, pinealocytes and skeletal muscle cells. In embryonic midbrain cultures, recombinant human GDNF promoted the survival and morphological differentiation of dopaminergic neurons and increased their high-affinity dopamine uptake.

Product Properties

Synonyms	Astrocyte-derived trophic factor, ATF, ATF-1, ATF2, GDNF, HFB1-GDNF, HGDNF, HSCR3
Accession	P48540
GeneID	14573
Source	E.coli-derived mouse GDNF, Ser78-Ile211.
Molecular Weight	Approximately 29.9 kDa.
AA Sequence	SPDKQAAALP RRERNRQAAA ASPENSRGKG RRGQRGKNRG CVLTAIHLNV TDLGLGYETK EELIFRYCSG SCESAETMYD KILKNLSRSR RLTSKVGQA CCRPVAFDDD LSFLLDDNLVY HILRKHSKR CGCI
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	>95% by SDS-PAGE and HPLC analyses.
Biological Activity	The ED50 as determined by a cell proliferation assay using rat C6 cells is less than 0.2 ng/mL, corresponding to a specific activity of $> 5.0 \times 10^6$ IU/mg. Fully biologically active when compared to standard.
Endotoxin	< 0.1 EU per 1 µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, with 0.05% Tween-20.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $\leq -20^\circ\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!