

Recombinant Rat GDNF Protein

Product Information

Product Name	Cat#	Size
Recombinant Rat GDNF Protein	92104ES05	2µg
	92104ES10	10 µg
	92104ES50	50 µg
	92104ES60	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.

Product Properties

Synonyms	Astrocyte-derived trophic factor, ATF, ATF-1, ATF2, GDNF, HFB1-GDNF, HGDNF, HSCR3
Accession	Q07731
GeneID	25453
Source	E.coli-derived rat GDNF, Ser78-Ile211.
Molecular Weight	Approximately 29.8 kDa.
AA Sequence	SPDKQAAALP RRERNRQAAA ASPENSRGKG RRGQRGKNRG CVLTAIHLNV TDLGLGYETK EELIFRYCSG SCEAAETMYD KILKNLSRSR RLTSKVGQA CCRPVAFDDD LSFLDDSLVY HILRKHSKR CGCI
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	>98% by SDS-PAGE and HPLC analyses.
Biological Activity	The ED ₅₀ 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 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 1 × PBS, pH 7.4.
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!