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GDNF, murine recombinant protein
Glial-Derived Neurotrophic Factor, ATF-1
Catalog # PBV10786r

Specification

GDNF, murine recombinant protein - Product info

Primary Accession	P48540
Calculated MW	**15.1 kDa KDa**

GDNF, murine recombinant protein - Additional Info

Gene ID	**14573**
Gene Symbol	**GDNF**
Other Names	
Glial-Derived Neurotrophic Factor, ATF-1	
Gene Source	**Human**
Source	**E.coli**
Assay&Purity	**SDS-PAGE; ≥98%**
Assay2&Purity2	**HPLC;**
Recombinant	**Yes**
Sequence	**MSPDKQAAAL PRRERNRQAA AASPENSRGK GRRGQRGKNR GCVLTAIHLN VTDLGLGYET KEELIFRYCS GSCESAETMY DKILKNLSRS RRLTSDKVGQ ACCRPVAFDD DLSFLDDNLV YHILRKHSAK RCGCI**

Target/Specificity
GDNF

Application Notes
Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Format
Lyophilized powder

Storage
-20°C; Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Sodium citrate.

GDNF, murine recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GDNF, murine recombinant protein - Images

GDNF, murine recombinant protein - Background

GDNF is a disulfide-linked homodimeric neurotrophic factor structurally related to Artemin, Neurturin and Persephin. These proteins belong to the cysteine-knot superfamily of growth factors that assume stable dimeric protein structures. GDNF signals through a multicomponent receptor system, composed of a RET and one of the four GFRα (α1-α4) receptors. GDNF specifically promotes dopamine uptake and survival and morphological differentiation of midbrain neurons. Using Parkinson's disease mouse model, GDNF has been shown to improve conditions such as bradykinesia, rigidity, and postural instability. The functional murine GDNF ligand is a disulfide-linked homodimer, of two 15.1 kDa polypeptide chains called monomers. Each monomer contains seven conserved cysteine residues, one of which is used for inter-chain disulfide bridging and the others are involved in intramolecular ring formation known as the cysteine knot configuration.

GDNF, murine recombinant protein - References

Watabe K.,et al.J. Neurosci. Res. 41:279-290(1995).
Hellmich H.L.,et al.Mech. Dev. 54:95-105(1996).
Matsushita N.,et al.Gene 203:149-157(1997).
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