

32-20148: Animal-Free Recombinant Rat GDNF(Discontinued)

Alternative Name : Glial-Derived Neurotrophic Factor, ATF-1

Description

Source: **E.coli**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 GFRA α (Alpha 1-Alpha 4) receptors. GDNF specifically promotes dopamine uptake and survival, and morphological differentiation of midbrain neurons. Using a Parkinson's disease mouse model, GDNF has been shown to improve conditions such as bradykinesia, rigidity, and postural instability. The functional rat GDNF ligand is a disulfide-linked homodimer consisting of two 15 kDa polypeptide chains called monomers. Each monomer contains seven conserved cysteine residues, including Cys-101, which is used for inter-chain disulfide bridging, and others that are involved in the intramolecular ring formation known as the cysteine-knot configuration. The calculated molecular weight of Recombinant Rat GDNF is 30.0 kDa.

Product Info

Amount : 2 μ g / 10 μ g

Purification : Purity: \geq 98% by SDS-PAGE gel and HPLC analyses.

Content : This recombinant protein is supplied in lyophilized form.

Amino Acid : MSPDKQAAAL PRRERNRQAA AASPENSRGK GRRGQRGKNR GCVLTAIHLN VTDLGLGYET KEELIFRYCS
GSCEAAETMY DKILKNLSRS RRLTSDKVGQ ACCRPVAFDD DLSFLDDSLV YHILRKHSAK RCGCI

Application Note

Determined by its ability to stimulate the proliferation of rat C6 cells.