SANTA CRUZ BIOTECHNOLOGY, INC.

GDNF (H-134): sc-9010



BACKGROUND

Glial cell line-derived neurotrophic factor (GDNF) has been identified as a potent neurotrophic factor that enhances survival of midbrain dopaminergic neurons. GDNF is a glycosylated, disulfide-bonded homodimer and is a distantly related member of the TGFB superfamily of growth regulatory ligands. GDNF contains the seven conserved cysteine residues in the same relative spacing characteristic of all members of the TGFB superfamily. In embryonic midbrain cultures, GDNF promotes the survival and morphological differentiation of dopaminergic neurons and increases their high-affinity dopamine uptake. On the basis of these findings, it has been suggested that GDNF may have utility in the treatment of Parkinson's disease, which is marked by progressive degeneration of midbrain dopaminergic neurons.

CHROMOSOMAL LOCATION

Genetic locus: GDNF (human) mapping to 5p13.2; Gdnf (mouse) mapping to 15 A1.

SOURCE

GDNF (H-134) is a rabbit polyclonal antibody raised against amino acids 78-134 of GDNF of human origin.

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

GDNF (H-134) is recommended for detection of GDNF of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GDNF (H-134) is also recommended for detection of GDNF in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GDNF siRNA (h): sc-35462, GDNF siRNA (m): sc-35463, GDNF shRNA Plasmid (h): sc-35462-SH, GDNF shRNA Plasmid (m): sc-35463-SH, GDNF shRNA (h) Lentiviral Particles: sc-35462-V and GDNF shRNA (m) Lentiviral Particles: sc-35463-V.

Molecular Weight of GDNF: 15 kDa.

Positive Controls: mouse brain extract: sc-2253.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



GDNF (H-134): sc-9010. Western blot analysis of human recombinant GDNF

SELECT PRODUCT CITATIONS

- 1. Ito, Y., et al. 2005. Expression of glial cell line-derived neurotrophic factor family members and their receptors in pancreatic cancers. Surgery 138: 788-794.
- 2. Esposito, E., et al. 2011. Effects of palmitoylethanolamide on release of mast cell peptidases and neurotrophic factors after spinal cord injury. Brain Behav. Immun. 25: 1099-1112.
- 3. Anastasía, A., et al. 2011. Glial cell-line derived neurotrophic factor is essential for electroconvulsive shock-induced neuroprotection in an animal model of Parkinson's disease. Neuroscience 195: 100-111.
- 4. Impellizzeri, D., et al. 2012. The effects of a polyphenol present in olive oil, oleuropein aglycone, in an experimental model of spinal cord injury in mice. Biochem. Pharmacol. 83: 1413-1426.
- 5. Esposito, E., et al. 2012. Neuroprotective activities of palmitoylethanolamide in an animal model of Parkinson's disease. PLoS ONE 7: e41880.
- 6. Esposito, E., et al. 2012. The NAMPT inhibitor FK866 reverts the damage in spinal cord injury. J. Neuroinflammation 9: 66.
- 7. Doursout, M.F., et al. 2013. Inflammatory cells and cytokines in the olfactory bulb of a rat model of neuroinflammation; insights into neurodegeneration? J. Interferon Cytokine Res. 33: 376-383.
- 8. Genovese, T., et al. 2013. Post-ischaemic thyroid hormone treatment in a rat model of acute stroke. Brain Res. 1513: 92-102.
- 9. Crupi, R., et al. 2013. Exogenous T3 administration provides neuroprotection in a murine model of traumatic brain injury. Pharmacol. Res. 70: 80-89.

Try GDNF (B-8): sc-13147 or GDNF (E-10): sc-398555, MONOS Satisfation

Guaranteed

our highly recommended monoclonal aternatives to GDNF (H-134). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor[®] 647 conjugates, see GDNF (B-8): sc-13147.