

CDNF Antibody

Catalog # ASC10588

Specification

CDNF Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

Application Notes

WB <u>Q49AH0</u>

> <u>Q49AH0</u>, <u>441549</u> **Human, Mouse, Rat**

Rabbit Polyclonal

IgG

CDNF antibody can be used for detection of CDNF by Western blot at $2 - 4 \mu g/mL$.

Antibody can also be used for

immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20

μg/mL.

CDNF Antibody - Additional Information

Gene ID 441549

Target/Specificity

CDNF antibody was raised against a 9 amino acid synthetic peptide from near the carboxy terminus of human CDNF.

The immunogen is located within the last 50 amino acids of CDNF.

Reconstitution & Storage

CDNF antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

CDNF Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CDNF Antibody - Protein Information

Name CDNF

Synonyms ARMETL1

Function

Trophic factor for dopamine neurons. Prevents the 6- hydroxydopamine (6-OHDA)-induced degeneration of dopaminergic neurons. When administered after 6-OHDA-lesioning, restores the dopaminergic function and prevents the degeneration of dopaminergic neurons in substantia nigra (By similarity).

Cellular Location



Secreted

Tissue Location

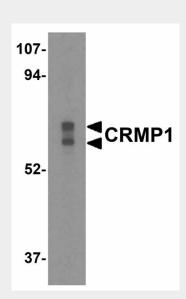
Widely expressed in neuronal and non-neuronal tissues. In the brain, highest levels in the optic nerve and corpus callosum.

CDNF Antibody - Protocols

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

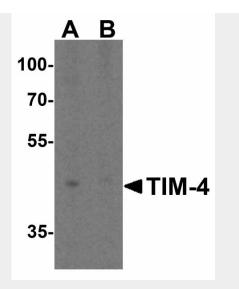
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

CDNF Antibody - Images



Western blot analysis of CRMP1 in Caco-2 cell lysate with CRMP1 antibody at 0.5 µg/mL.





Western blot analysis of TIM-4 in RAW264.7 cell lysate with TIM-4 antibody at 2 μ g/mL in (A) the absence and (B) the presence of blocking peptide.

CDNF Antibody - Background

CDNF Antibody: The conserved dopamine neurotrophic factor (CDNF) is a neurotrophic factor for dopaminergic neurons and highly homologous to the mesencephalic-astrocyte-derived neuro-trophic factor. Somewhat surprisingly, CDCF is expressed at higher levels in tissues such as heart, skeletal muscle and testes than in brain. Similar to the glial cell line-derived neurotrophic factor (GDNF), CDNF can prevent the 6-hydroxylamine (6-OHDA)-induced degeneration of dopaminergic neurons in a rat model of Parkinson's disease. Furthermore, CDNF was able to restore the dopaminergic function and prevent the degeneration of dopaminergic neurons in the substantia nigra, suggesting that CDNF might be suitable for the treatment of Parkinson's disease. At least two isoforms of CDNF are known to exist.

CDNF Antibody - References

Lindholm P, Voutilainen MH, Lauren J, et al. Novel neurotrophic factor CDNF protects and rescues midbrain dopamine neurons in vivo. Nature 2007; 448:73-7.

Petrova P, Raibekas A, Pevsner J, et al. MANF: a new mesencephalic, astrocyte-derived neurotrophic factor with selectivity for dopaminergic neurons. J. Mol. Neurosci.2003; 20:173-88.