

CDNF Antibody

Catalog # ASC10588

#### Specification

## **CDNF Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC-P, IF, E <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 μg/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

Target/Specificity

#### **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** 

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441549



### Secreted

**Tissue Location** 

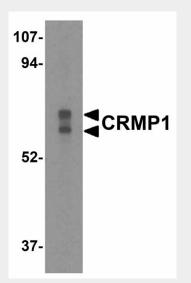
Widely expressed in neuronal and non-neuronal tissues. In the brain, highest levels in the optic nerve and corpus callosum.

#### **CDNF Antibody - Protocols**

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

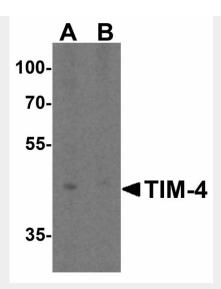
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# **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  $\mu$ 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. Nature2007; 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.