

### PTPN5 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17036a

## Specification

# PTPN5 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>P54829</u> <u>NP\_001035059.1</u>, <u>NP\_008837.1</u> Human Rabbit Polyclonal Rabbit IgG 63538 1-30

## PTPN5 Antibody (N-term) - Additional Information

### Gene ID 84867

### **Other Names**

Tyrosine-protein phosphatase non-receptor type 5, Neural-specific protein-tyrosine phosphatase, Striatum-enriched protein-tyrosine phosphatase, STEP, PTPN5

#### Target/Specificity

This PTPN5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human PTPN5.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

PTPN5 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **PTPN5 Antibody (N-term) - Protein Information**

Name PTPN5



**Function** May regulate the activity of several effector molecules involved in synaptic plasticity and neuronal cell survival, including MAPKs, Src family kinases and NMDA receptors.

## **Cellular Location**

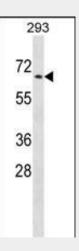
Endoplasmic reticulum membrane; Multi-pass membrane protein

### PTPN5 Antibody (N-term) - 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>

# PTPN5 Antibody (N-term) - Images



PTPN5 Antibody (N-term) (Cat. #AP17036a) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the PTPN5 antibody detected the PTPN5 protein (arrow).

## PTPN5 Antibody (N-term) - Background

STEP (Protein-tyrosine phosphatase striatum-enriched) is a neural-specific protein-tyrosine phosphatase. It is also known as PTPN5 (tyrosine-protein phosphatase, non-receptor type 5). STEP immunoreactive areas are most intense in the regions of the CNS receiving a dopaminergic input (e.g. striatum, basal ganglia). STEP is part of the NMDA receptor (R) complex and inhibits NMDAR single-channel activity and NMDAR-mediated synaptic current. Phosphorylation of STEP, via D1 and PKA activation by dopamine, decreases the activity of STEP by reducing its affinity for substrate.

# **PTPN5 Antibody (N-term) - References**

Kurup, P., et al. J. Neurosci. 30(17):5948-5957(2010) Rose, J. Phd, et al. Mol. Med. (2010) In press : Korff, S., et al. BMC Cancer 8, 329 (2008) : Eswaran, J., et al. Biochem. J. 395(3):483-491(2006) Nguyen, T.H., et al. J. Biol. Chem. 277(27):24274-24279(2002)