

PTPN5 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17036a

Specification

PTPN5 Antibody (N-term) - Product Information

Application WB,E
Primary Accession P54829

Other Accession <u>NP_001035059.1</u>, <u>NP_008837.1</u>

Reactivity
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Human
Rabbit
Polyclonal
Rabbit IgG
C3538
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

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

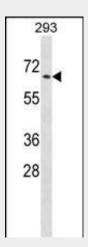
Endoplasmic reticulum membrane; Multi-pass membrane protein

PTPN5 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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)