

**PTPN5 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP17036a**

### Specification

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

Application	WB, E
Primary Accession	<a href="#">P54829</a>
Other Accession	<a href="#">NP_001035059.1</a> , <a href="#">NP_008837.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	63538
Antigen Region	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

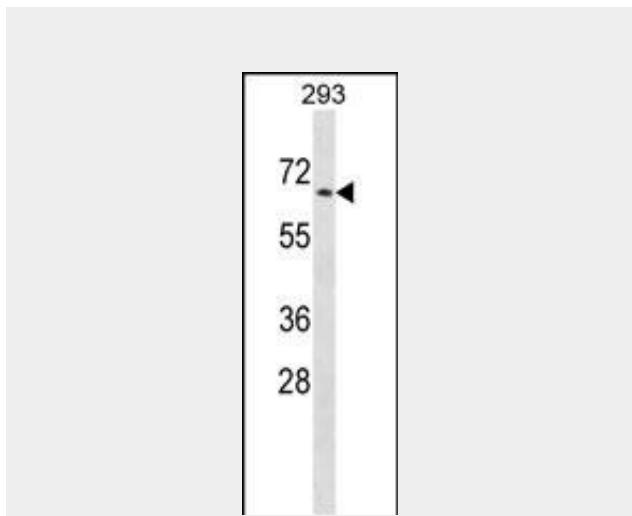
#### Format

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) (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.

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

277(27):24274-24279(2002)

#### **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 Cytometry](#)
- [Cell Culture](#)