

Rabbit anti-Human, mouse STEP / PTPN5 Polyclonal Antibody | anti-PTPN5 antibody

STEP / PTPN5 Antibody (N-Term)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA285466	Rabbit	Human, mouse	Immunohistochemistry, ELISA, Western Blot

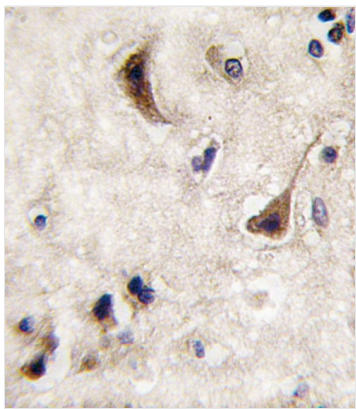
PRODUCT SYNONYMS

STEP / PTPN5; Polyclonal Antibody; STEP / PTPN5 Antibody (N-Term); Tyrosine-protein phosphatase non-receptor type 5; Neural-specific protein-tyrosine phosphatase; Striatum-enriched protein-tyrosine phosphatase; STEP; PTPN5; anti-PTPN5 antibody

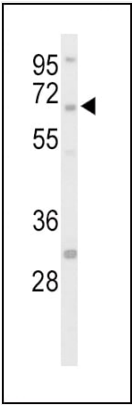
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, mouse
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This STEP / PTPN5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 168-198 amino acids from the N-terminal region of human STEP / PTPN5.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Concentration	Vial Concentration: 2 (varies by lot)
Sequence Positions	168-198
Sequence Length	541
Applicable Applications for anti-PTPN5 antibody	IHC (Immunohistochemistry), ELISA, WB (Western Blot)
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
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

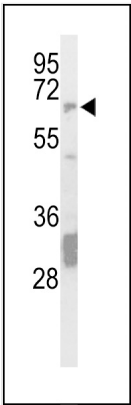
IMAGES



IHC (Immunohistochemisry)
Formalin-fixed and paraffin-embedded human brain tissue reacted with STEP antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



WB (Western Blot)
Western blot analysis of hSTEP-Q155 in HepG2 cell line lysates (35ug/lane). STEP (arrow) was detected using the purified Pab.



WB (Western Blot)
Western blot analysis of hSTEP-Q155 in mouse brain tissue lysates (35ug/lane). STEP (arrow) was detected using the purified Pab

ADDITIONAL INFORMATION

Related Product Information for anti-PTPN5 antibody	STEP (striatum-enriched phosphatase) is a neural-specific protein-tyrosine phosphatase, first isolated from the rat brain. The 537-amino acid predicted human protein as isolated from cDNA sequences is between 85 and 90% identical to the mouse and rat sequences. In rat neuronal cell cultures, glutamate-mediated activation of N-methyl-D-aspartate (NMDA) receptors leads to the rapid but transient phosphorylation of extracellular signal-related kinase-2 (ERK2). NMDA-mediated influx of calcium, activates the calcium-dependent phosphatase calcineurin and the resulting dephosphorylation and activation of STEP. STEP then inactivatea ERK2 through tyrosine dephosphorylation and blocks translocation of the kinase to the nucleus. STEP plays a significant role in regulating the ERK activation and downstream signaling in neurons.
Product Categories/Family for anti-PTPN5 antibody	Neuroscience; Signal Transduction
References	Ota, T., et al., Nat. Genet. 36(1):40-45 (2004). Li, X., et al., Genomics 28(3):442-449 (1995).

NCBI AND UNIPROT INFORMATION

NCBI GI #	90652861
NCBI GeneID	84867
NCBI Accession #	NP_001035059.1; NP_001265165.1; NP_001265167.1; NP_001265168.1; NP_008837.1; NP_116170.3

NCBI GenBank Nucleotide #	NM_001039970.1
UniProt Accession #	P54829 ; Q6P1Z2 ; Q8N2A1 ; Q8NDP8 ; B3KXG7 ; B7Z386 ; B7ZAF5 ; D3DQY7
Molecular Weight	63538
NCBI Official Full Name	tyrosine-protein phosphatase non-receptor type 5 isoform b
NCBI Official Synonym Full Names	protein tyrosine phosphatase, non-receptor type 5 (striatum-enriched)
NCBI Official Symbol	PTPN5
NCBI Official Synonym Symbols	STEP; PTPSTEP
NCBI Protein Information	tyrosine-protein phosphatase non-receptor type 5
UniProt Protein Name	Tyrosine-protein phosphatase non-receptor type 5
UniProt Gene Name	PTPN5
UniProt Synonym Gene Names	STEP
UniProt Entry Name	PTN5_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/step-ptpn5-antibody-immunohistochemistry-western-blot-elisa/285466>