

PTPN5 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP17036a

Specification

PTPN5 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession [P54829](#)

PTPN5 Antibody (N-term) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PTPN5 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

PTPN5 Antibody (N-term) Blocking Peptide - Images

PTPN5 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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)