

**PTP epsilon Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP8416a****Specification**

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**PTP epsilon Antibody (C-term) Blocking peptide - Product Information**Primary Accession [P23469](#)**PTP epsilon Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 5791**Other Names**

Receptor-type tyrosine-protein phosphatase epsilon, Protein-tyrosine phosphatase epsilon, R-PTP-epsilon, PTPRE

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP8416a](/product/products/AP8416a) was selected from the C-term region of human PTPepsilon . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**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.

**PTP epsilon Antibody (C-term) Blocking peptide - Protein Information****Name** PTPRE**Function**

Isoform 1 plays a critical role in signaling transduction pathways and phosphoprotein network topology in red blood cells. May play a role in osteoclast formation and function (By similarity).

**Cellular Location**

[Isoform 1]: Cell membrane; Single-pass type I membrane protein [Isoform 3]: Cytoplasm.

**Tissue Location**

Expressed in giant cell tumor (osteoclastoma rich in multinucleated osteoclastic cells).

**PTP epsilon Antibody (C-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**PTP epsilon Antibody (C-term) Blocking peptide - Images****PTP epsilon Antibody (C-term) Blocking peptide - Background**

PTPepsilon is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. Two alternatively spliced transcript variants of the gene have been reported, one of which encodes a receptor-type PTP that possesses a short extracellular domain, a single transmembrane region, and two tandem intracytoplasmic catalytic domains; Another one encodes a PTP that contains a distinct hydrophilic N-terminus, and thus represents a nonreceptor-type isoform of this PTP. Studies of the similar gene in mice suggested the regulatory roles of this PTP in RAS related signal transduction pathways, cytokines induced SATA signaling, as well as the activation of voltage-gated K<sup>+</sup> channels.

**PTP epsilon Antibody (C-term) Blocking peptide - References**

Toledano-Katchalski, H., et al., Mol. Cell. Biol. 23(15):5460-5471 (2003). Blanchetot, C., et al., J. Biol. Chem. 277(49):47263-47269 (2002). Wabakken, T., et al., Scand. J. Immunol. 56(3):276-285 (2002). Wabakken, T., et al., Scand. J. Immunol. 56(2):195-203 (2002). Tanuma, N., et al., J. Biol. Chem. 275(36):28216-28221 (2000).