

**PGAM5 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP17900b****Specification**

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**PGAM5 Antibody (C-term) Blocking Peptide - Product Information**

Primary Accession [O96HS1](#)  
Other Accession [NP\\_612642.2](#), [NP\\_001164014.1](#)

**PGAM5 Antibody (C-term) Blocking Peptide - Additional Information**

**Gene ID** 192111

**Other Names**

Serine/threonine-protein phosphatase PGAM5, mitochondrial, Bcl-XL-binding protein v68,  
Phosphoglycerate mutase family member 5, PGAM5

**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.

**PGAM5 Antibody (C-term) Blocking Peptide - Protein Information**

**Name** PGAM5

**Function**

Mitochondrial serine/threonine phosphatase that dephosphorylates various substrates and thus plays a role in different biological processes including cellular senescence or mitophagy (PubMed:<a href="http://www.uniprot.org/citations/24746696" target="\_blank">24746696</a>, PubMed:<a href="http://www.uniprot.org/citations/32439975" target="\_blank">32439975</a>). Modulates cellular senescence by regulating mitochondrial dynamics. Mechanistically, participates in mitochondrial fission through dephosphorylating DNM1L/DRP1 (PubMed:<a href="http://www.uniprot.org/citations/32439975" target="\_blank">32439975</a>). Additionally, dephosphorylates MFN2 in a stress- sensitive manner and consequently protects it from ubiquitination and degradation to promote mitochondrial network formation (PubMed:<a href="http://www.uniprot.org/citations/37498743" target="\_blank">37498743</a>). Regulates mitophagy independent of PARKIN by interacting with and dephosphorylating FUNDC1, which interacts with LC3 (PubMed:<a href="http://www.uniprot.org/citations/24746696" target="\_blank">24746696</a>). Regulates anti-oxidative response by forming a tertiary complex with KEAP1 and NRF2 (PubMed:<a href="http://www.uniprot.org/citations/18387606" target="\_blank">18387606</a>). Regulates necroptosis by acting as a RIPK3 target and recruiting the RIPK1-RIPK3- MLKL necrosis 'attack' complex to mitochondria (PubMed:<a

href="http://www.uniprot.org/citations/22265414" target="\_blank">22265414</a>).

**Cellular Location**

Mitochondrion outer membrane; Single-pass membrane protein. Mitochondrion inner membrane; Single-pass membrane protein. Note=Isoform 2 overexpression results in the formation of disconnected punctuate mitochondria distributed throughout the cytoplasm. Isoform 1 overexpression results in the clustering of mitochondria around the nucleus

**PGAM5 Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**PGAM5 Antibody (C-term) Blocking Peptide - Images****PGAM5 Antibody (C-term) Blocking Peptide - Background**

PGAM5 displays phosphatase activity for serine/threonine residues, and, dephosphorylates and activates MAP3K5 kinase. Has apparently no phosphoglycerate mutase activity. May be regulator of mitochondrial dynamics. Substrate for a KEAP1-dependent ubiquitin ligase complex. Contributes to the repression of NFE2L2-dependent gene expression.