

# PGAM5 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57001

### Specification

## PGAM5 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC-P, IHC-F, IF, ICC, E <u>096HS1</u> Rat Rabbit Polyclonal 32004

### **PGAM5** Polyclonal Antibody - Additional Information

Gene ID 192111

**Other Names** 

Serine/threonine-protein phosphatase PGAM5, mitochondrial, 3.1.3.16, Bcl-XL-binding protein v68, Phosphoglycerate mutase family member 5, PGAM5

Dilution <span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_ICC">ICC~~N/A</span><br \><span class ="dilution\_E">E~~N/A</span>

Format 0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## **PGAM5 Polyclonal Antibody - 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">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/18387606" target="\_blank">22265414</a>).

#### **Cellular Location**

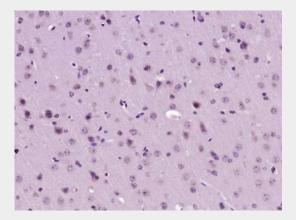
Mitochondrion outer membrane; Single-pass membrane protein. Mitochondrion inner membrane; Single-pass membrane protein. Note=Isoform 2 overexpression results in the formation of disconnected punctuate mitochondria distributed throughout the cytoplasm. Isoform 1 overexpression results in the clustering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

### PGAM5 Polyclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### PGAM5 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PGAM5) Polyclonal Antibody, Unconjugated (bs-18228R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.