

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 IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

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:24746696, PubMed:24746696, PubMed:32439975). Modulates cellular senescence by regulating mitochondrial dynamics. Mechanistically, participates in mitochondrial fission through dephosphorylating DNM1L/DRP1 (PubMed:32439975). 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). Regulates mitophagy independent of PARKIN by interacting with and dephosphorylating FUNDC1, which interacts with LC3 (PubMed:24746696). Regulates anti-oxidative response by forming a tertiary complex with KEAP1 and NRF2 (PubMed:18387606). Regulates necroptosis by acting as a RIPK3 target and recruiting the RIPK1-RIPK3- MLKL necrosis 'attack' complex to mitochondria (PubMed:22265414).

Cellular Location

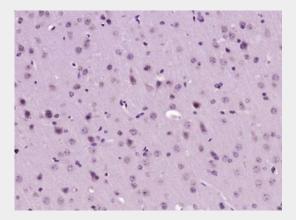
Mitochondrion outer membrane; Single-pass membrane protein. Mitochondrion inner membrane; Single-pass membrane protein. Note=Isoform 2 overexpression results in the formation of disconnected punctuate mitochondria distributed throughout the cytoplasm. Isoform 1 overexpression results in the clustering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