

# Rabbit Anti-PGAM5 antibody

# SL18228R

Product Name:	PGAM5
Chinese Name:	丝氨酸/苏氨酸蛋白磷酸酶PGAM5抗体
Alias:	Bcl-XL-binding protein v68; BXLBv68; MGC5352; mitochondrial; PGAM5; PGAM5_HUMAN; Phosphoglycerate mutase family member 5; Serine/threonine protein phosphatase PGAM5 mitochondrial; Serine/threonine-protein phosphatase PGAM5.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	32kDa
Cellular localization:	cytoplasmic Mitochondrion cytoplasmic Mitochondrion
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PGAM5:51-150/289
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	<u>PubMed</u>
Product Detail:	Members of the PGAM (phosphoglycerate mutase) family of proteins are important components of glucose and 2,3-BPGA (2,3-bisphosphoglycerate) metabolism. They are responsible for catalyzing the transfer of phospho groups between the carbon atoms of phosphoglycerates. PGAM5 (phosphoglycerate mutase family member 5), also known

as Bcl-xL-binding protein v68, is a 289 amino acid protein belonging to the BPG-dependent PGAM subfamily. PGAM5 exists as two isoforms produced by alternative splicing events, with isoform two localized to the cytoplasm and isoform one localized to both the cytoplasm and the nucleus. PGAM5 forms a dimer and has been found to interact with Bcl-xS/L and Keap1.

#### Function:

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.

## **Subcellular Location:**

Mitochondrion. Mitochondrion outer membrane. Membrane. 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.

## Similarity:

Belongs to the phosphoglycerate mutase family. BPG-dependent PGAM subfamily.

## **SWISS:**

O96HS1

#### Gene ID:

192111

## Database links:

Entrez Gene: 192111 Human

Entrez Gene: 72542 Mouse

Entrez Gene: 288731 Rat

SwissProt: Q96HS1 Human

SwissProt: Q8BX10 Mouse

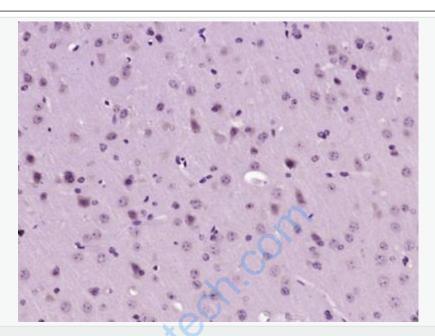
SwissProt: Q562B5 Rat

Unigene: 102558 Human

## **Important Note:**

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.



## Picture:

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 (SL18228R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.