

## Product datasheet for **TA336785**

### PGAM1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC, Simple Western, WB
Recommended Dilution:	Simple Western: 1:400, Immunocytochemistry/ Immunofluorescence: 1:50, Western Blot: 0.5ug/ml, Immunohistochemistry-Paraffin: 1:300, Immunohistochemistry: 1:300, Knockdown Validated
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	A synthetic peptide made to a C-terminal portion of the human PGAM1 protein (between residues 200-254) [UniProt P18669]
Formulation:	PBS, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	phosphoglycerate mutase 1
Database Link:	<a href="#">NP_002620</a> <a href="#">Entrez Gene 18648 Mouse</a> <a href="#">Entrez Gene 5223 Human</a> <a href="#">P18669</a>



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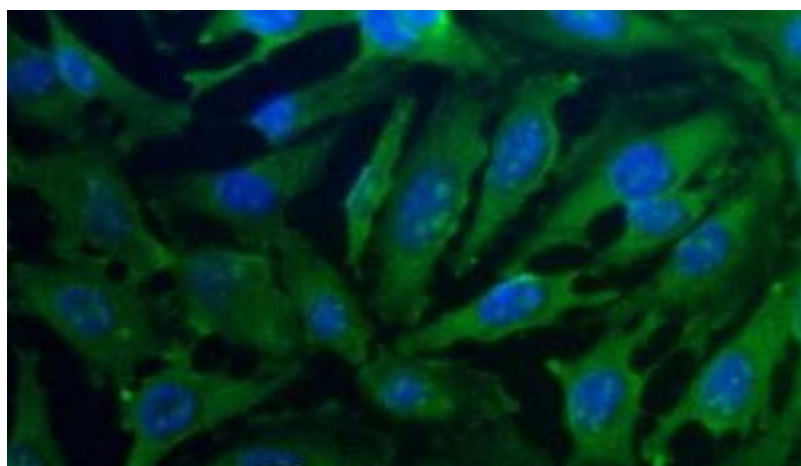
**Background:** PGAM1 (phosphoglycerate mutase 1) is an enzyme that regulates a unique step in glycolysis, and most of the glycolytic intermediates that are used as precursors for anabolic biosynthesis are upstream of this step. PGAM1 catalyzes the interconversion of 3- phosphoglycerate (3-PGA) to 2- phosphoglycerate (2-PGA), and becomes activated or "primed" by an intrinsic phosphatase activity that converts 2,3-bisphosphoglycerate (2, 3-BPGA) to 2-PGA, phosphorylating the active site histidine in the process. The phosphohistidine is essential to carryout the mutase reaction, converting 3-PGA to 2-PGA in glycolysis. Interestingly, PGAM1 is the rate-limiting enzyme of glycolysis in tumor cells, heart tissue, and leukocytes, and its inhibition by epoxide inhibitors is lethal to cancer cells. In many cancers, including hepatocellular carcinoma and colorectal cancer, PGAM1 activity is increased compared to that in the normal tissues, wherein its expression is upregulated through loss of TP53 as TP53 negatively regulates PGAM1 gene expression.

**Synonyms:** HEL-S-35; PGAM-B; PGAMA

**Note:** This PGAM1 antibody may be used in Western blot, Immunohistochemistry paraffin embedded sections and Immunocytochemistry/Immunofluorescence.

**Protein Pathways:** Glycolysis / Gluconeogenesis, Metabolic pathways

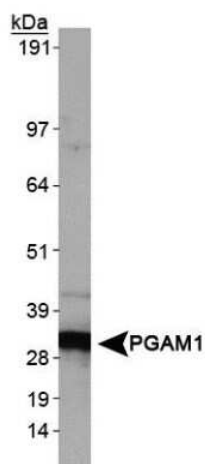
### Product images:



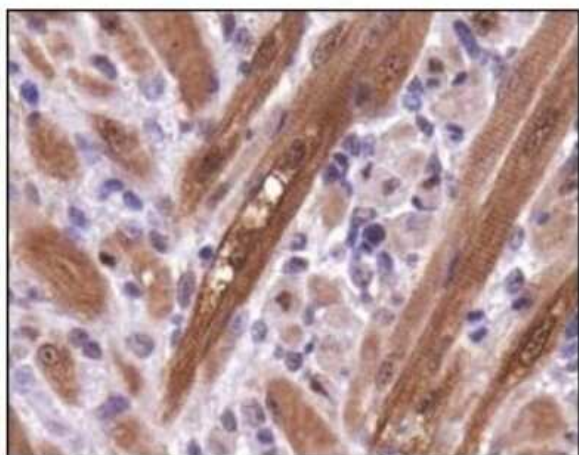
Immunocytochemistry/Immunofluorescence:  
PGAM1 Antibody TA336785 - Analysis of PGAM1  
in HeLa cells using TA336785. Nuclei (Blue) are  
counterstained using Hoechst 33258.



Simple Western: PGAM1 Antibody TA336785 - Simple Western lane view shows a specific band for PGAM1 in 0.05 mg/ml of Jurkat lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



Western Blot: PGAM1 Antibody TA336785 - Analysis of PGAM1 in Jurkat whole cell extracts



Immunohistochemistry: PGAM1 Antibody TA336785 - Analysis of PGAM1 in mouse tongue.