# abcam

# Product datasheet

# Anti-PGAM5 antibody ab126534

# \*\*\*\* 2 Abreviews 26 References 6 Images

#### Overview

Product name Anti-PGAM5 antibody

**Description** Rabbit polyclonal to PGAM5

Host species Rabbit

**Tested applications** Suitable for: ICC/IF, WB, IHC-P

Species reactivity Reacts with: Human

**Immunogen** Recombinant fragment corresponding to Human PGAM5 aa 61-146.

Sequence:

NWDRREPLSLINVRKRNVESGEEELASKLDHYKAKATRHI

**FLIRHSQYHV** 

DGSLEKDRTLTPLGREQAELTGLRLASLGLKFNKIV

Database link: **Q96HS1** 

Run BLAST with
Run BLAST with

Positive control ICC: MCF-7 whole cells; WB: RT-4 whole cell lysates transfected with siRNA; IHC-P: Human liver,

testis, tonsil and colon tissue.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7.20

Preservative: 0.02% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS

**Purity** Immunogen affinity purified

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**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

#### The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab126534 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews        | Notes   |
|-------------|------------------|---|
| ICC/IF      |                  | Use a concentration of 0.25 - 2 µg/ml.  |
| WB          | <b>★★★★★ (2)</b> | Use a concentration of 0.04 - 0.4 µg/ml. Predicted molecular weight: 32 kDa.  |
| IHC-P       |                  | 1/200 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |

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**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.

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

**Domain** According to PubMed:18387606, may contain a non-cleaved N-terminal mitochondrial targeting

sequence that targets PGAM5 to the cytosolic side of the outer mitochondrial membrane, instead

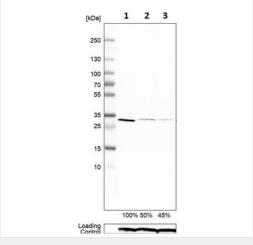
of a N-terminal transmembrane.

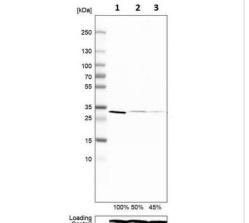
**Cellular localization** Mitochondrion. Mitochondrion outer membrane. Isoform 2 overexpression results in

the formation of disconnected punctuate mitochondria distributed throughout the cytoplasm.

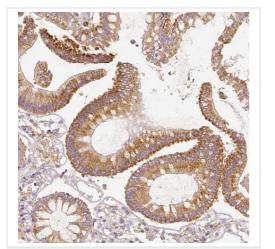
Isoform 1 overexpression results in the clustering of mitochondria around the nucleus.

# **Images**





Western blot - Anti-PGAM5 antibody (ab126534)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PGAM5 antibody (ab126534)



Lane 1: Control siRNA transfected into RT4 (Human urinary bladder cancer cell line) whole cell lysate

Lane 2: siRNA probe #1 transfected into RT4 whole cell lysate Lane 3: siRNA probe #2 transfected into RT4 whole cell lysate

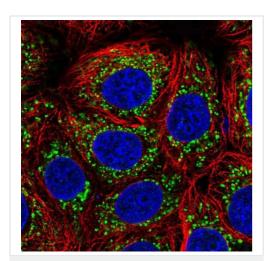
Predicted band size: 32 kDa

Loading control: Anti-PPIB

Genetic validation in WB by siRNA knockdown.

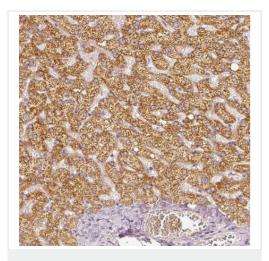
Immunohistochemical analysis of human colon tissue labeling PGAM5 in the granular cytoplasm of glandular cells with ab126534 at a 1/200 dilution.

Performed heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-PGAM5 antibody (ab126534)

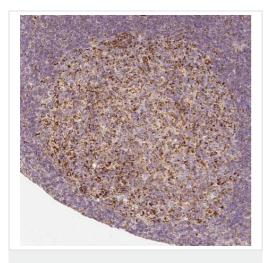
Immunocytochemical analysis of MCF7 (Human breast adenocarcinoma cell line) whole cells labeling PGAM5 in the mitochondria with ab126534 2 µg/ml.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PGAM5 antibody (ab126534)

Immunohistochemical analysis of human liver tissue labeling PGAM5 in the granular cytoplasm of hepatocytes with ab126534 at a 1/200 dilution.

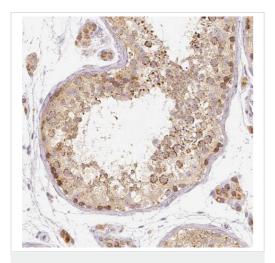
Performed heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PGAM5 antibody (ab126534)

Immunohistochemical analysis of human tonsil tissue labeling PGAM5 in the granular cytoplasm of germinal center cells with ab126534 at a 1/200 dilution.

Performed heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PGAM5 antibody (ab126534)

Immunohistochemical analysis of human testis tissue labeling PGAM5 in the granular cytoplasm of cells in seminiferous ducts with ab126534 at a 1/200 dilution.

Performed heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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