## Overview

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>Anti-PGAM5 antibody</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Rabbit polyclonal to PGAM5</td>
</tr>
<tr>
<td><strong>Host species</strong></td>
<td>Rabbit</td>
</tr>
<tr>
<td><strong>Tested applications</strong></td>
<td>Suitable for: ICC/IF, WB, IHC-P</td>
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<tr>
<td><strong>Species reactivity</strong></td>
<td>Reacts with: Human</td>
</tr>
<tr>
<td><strong>Immunogen</strong></td>
<td>Recombinant fragment corresponding to Human PGAM5 aa 61-146.</td>
</tr>
<tr>
<td><strong>Sequence</strong></td>
<td>NWDRREPLSLINVRKRNVESGEEELASKLDHYKAKATRHI FLIRHSQYHV DGSLEKDRTLPLGREQAELTGLRLASLGLKFNKIV</td>
</tr>
<tr>
<td><strong>Database link</strong></td>
<td>Q96HS1</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th><strong>Form</strong></th>
<th>Liquid</th>
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<tbody>
<tr>
<td><strong>Storage instructions</strong></td>
<td>Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.</td>
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</tbody>
</table>
| **Storage buffer** | pH: 7.20  
Preservative: 0.02% Sodium azide  
Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS |
| **Purity** | Immunogen affinity purified |
**Clonality**  
Polyclonal

**Isotype**  
IgG

**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. 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**

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**Applications**

**The Abpromise guarantee**  
Our Abpromise guarantee 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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICC/IF</td>
<td></td>
<td>Use a concentration of 0.25 - 2 µg/ml.</td>
</tr>
<tr>
<td>WB</td>
<td>★★★★★ ★ (2)</td>
<td>Use a concentration of 0.04 - 0.4 µg/ml. Predicted molecular weight: 32 kDa.</td>
</tr>
<tr>
<td>IHC-P</td>
<td></td>
<td>1/200 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.</td>
</tr>
</tbody>
</table>
**Western blot - Anti-PGAM5 antibody (ab126534)**

**All lanes**: Anti-PGAM5 antibody (ab126534) at 0.4 µg/ml

**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.

**Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PGAM5 antibody (ab126534)**

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.
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.

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.
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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