

# PIG-Y Antibody

Catalog # ASC10815

## Product Information

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| <b>Application</b>           | WB, IF, E, IHC-P                                                                                                                                                                                                                                                                                        |
| <b>Primary Accession</b>     | <a href="#">Q3MUJ2</a>                                                                                                                                                                                                                                                                                  |
| <b>Other Accession</b>       | <a href="#">NP_116295</a> , <a href="#">14249680</a>                                                                                                                                                                                                                                                    |
| <b>Reactivity</b>            | Human, Mouse                                                                                                                                                                                                                                                                                            |
| <b>Host</b>                  | Rabbit                                                                                                                                                                                                                                                                                                  |
| <b>Clonality</b>             | Polyclonal                                                                                                                                                                                                                                                                                              |
| <b>Isotype</b>               | IgG                                                                                                                                                                                                                                                                                                     |
| <b>Calculated MW</b>         | 8058                                                                                                                                                                                                                                                                                                    |
| <b>Concentration (mg/ml)</b> | 1 mg/mL                                                                                                                                                                                                                                                                                                 |
| <b>Conjugate</b>             | Unconjugated                                                                                                                                                                                                                                                                                            |
| <b>Application Notes</b>     | PIG-Y antibody can be used for detection of PIG-Y by Western blot at 2 $\mu$ g/mL. Despite its predicted molecular weight, PIG-Y often migrates at 28-30 kDa in SDS-PAGE. Antibody can also be used for immunohistochemistry starting at 2.5 $\mu$ g/mL. For immunofluorescence start at 20 $\mu$ g/mL. |

## Additional Information

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| <b>Gene ID</b>                      | 84992                                                                                                                                                                                                                                         |
| <b>Other Names</b>                  | Phosphatidylinositol N-acetylglucosaminyltransferase subunit Y,<br>Phosphatidylinositol-glycan biosynthesis class Y protein, PIG-Y, PIGY                                                                                                      |
| <b>Target/Specificity</b>           | PIGY; This antibody only detects isoform 1 of PIG-Y.                                                                                                                                                                                          |
| <b>Reconstitution &amp; Storage</b> | PIG-Y antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures. |
| <b>Precautions</b>                  | PIG-Y Antibody is for research use only and not for use in diagnostic or therapeutic procedures.                                                                                                                                              |

## Protein Information

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| <b>Name</b>              | PIGY ( <a href="#">HGNC:28213</a> )                                                                                                                                                                                                                                                                                                                                                   |
| <b>Function</b>          | Part of the glycosylphosphatidylinositol-N- acetylglucosaminyltransferase (GPI-GnT) complex that catalyzes the transfer of N-acetylglucosamine from UDP-N-acetylglucosamine to phosphatidylinositol and participates in the first step of GPI biosynthesis (PubMed: <a href="#">16162815</a> ). May act by regulating the catalytic subunit PIGA (PubMed: <a href="#">16162815</a> ). |
| <b>Cellular Location</b> | Endoplasmic reticulum membrane; Multi-pass membrane protein                                                                                                                                                                                                                                                                                                                           |

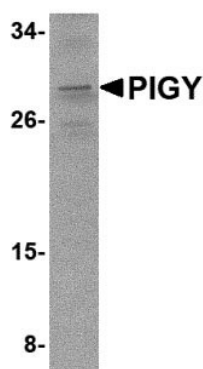
## Background

**PIG-Y Antibody:** Glycosylphosphatidylinositol (GPI) lipid anchoring is an important post-translational modification of proteins that takes place in the endoplasmic reticulum. The synthesis of GPI is initiated by GPI-N-acetylglucosaminyltransferase (GPI-GnT), a complex of proteins including PIG-A, PIG-H, PIG-C, GPI1, and DPM2. PIG-Y, the mammalian homolog to yeast Eri1p, is also thought to be involved in the biosynthesis of GPI. The PIG-Y gene encodes two proteins, one of which arises from leaky scanning of the mRNA.

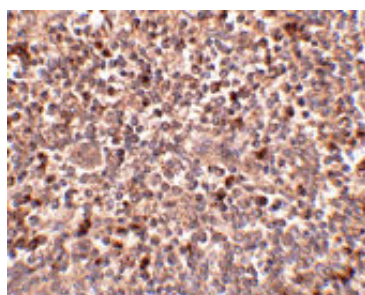
## References

Eisenhaber B, Maurer-Stroh S, Novatchkova M, et al. Enzymes and auxiliary factors for GPI lipid anchor biosynthesis and post-translational transfer to proteins. *Bioessays*2003; 25:367-85.  
Watanabe R, Murakami Y, Marmor MD, et al. Initial enzyme for glycosylphosphatidylinositol biosynthesis requires PIG-P and is regulated by DPM2. *EMBO J.*2000; 19:4402-11.  
Murakami Y, Siripanyaphinoyo U, Hong Y, et al. The initial enzyme for glycosylphosphatidylinositol biosynthesis requires PIG-Y, a seventh component. *Mol. Biol. Cell*2005; 16:5236-46.

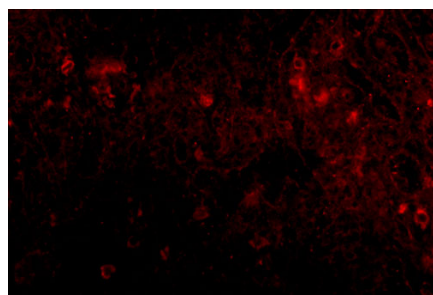
## Images



Western blot analysis of PIG-Y in A-20 cell lysate with PIG-Y antibody at 2 µg/mL.



Immunohistochemistry of PIGY in human spleen tissue with PIGY antibody at 2.5 µg/mL.



Immunofluorescence of PIGY in human spleen tissue with PIGY1 antibody at 20 µg/mL.

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