

**PIG-Y Antibody**  
**Catalog # ASC10815****Specification**

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**PIG-Y Antibody - Product Information**

|                   |                                                                                                                                                                                                                                                                                          |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application       | WB, IHC, IF                                                                                                                                                                                                                                                                              |
| Primary Accession | <a href="#">Q3MUY2</a>                                                                                                                                                                                                                                                                   |
| Other Accession   | <a href="#">NP_116295</a> , <a href="#">14249680</a>                                                                                                                                                                                                                                     |
| Reactivity        | Human, Mouse                                                                                                                                                                                                                                                                             |
| Host              | Rabbit                                                                                                                                                                                                                                                                                   |
| Clonality         | Polyclonal                                                                                                                                                                                                                                                                               |
| Isotype           | IgG                                                                                                                                                                                                                                                                                      |
| Application Notes | PIG-Y antibody can be used for detection of PIG-Y by Western blot at 2 µg/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 µg/mL. For immunofluorescence start at 20 µg/mL. |

**PIG-Y Antibody - Additional Information**Gene ID **84992****Target/Specificity**

PIGY; This antibody only detects isoform 1 of PIG-Y.

**Reconstitution & Storage**

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.

**Precautions**

PIG-Y Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**PIG-Y Antibody - Protein Information****Name** PIGY ([HGNC:28213](#))**Function**

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="http://www.uniprot.org/citations/16162815" target="\_blank">16162815</a>). May act by regulating the catalytic subunit PIGA (PubMed:<a href="http://www.uniprot.org/citations/16162815" target="\_blank">16162815</a>).

**Cellular Location**

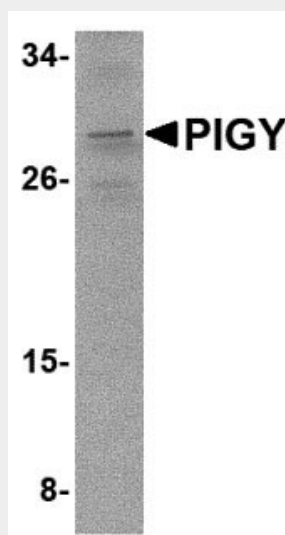
Endoplasmic reticulum membrane; Multi-pass membrane protein

### PIG-Y Antibody - Protocols

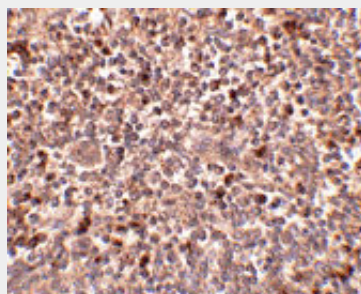
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

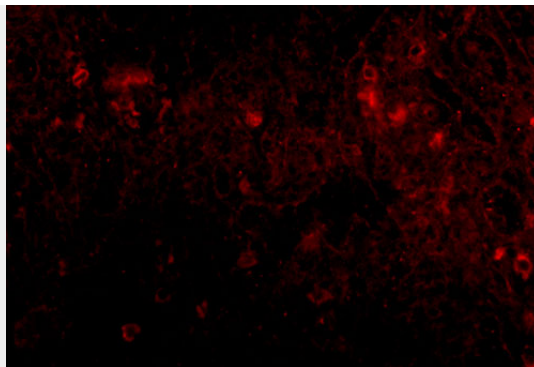
### PIG-Y Antibody - Images



Western blot analysis of PIG-Y in A-20 cell lysate with PIG-Y antibody at 2  $\mu\text{g/mL}$ .



Immunohistochemistry of PIGY in human spleen tissue with PIGY antibody at 2.5  $\mu\text{g/mL}$ .



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

#### **PIG-Y Antibody - 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.

#### **PIG-Y Antibody - 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.