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PIG-Y Antibody
Catalog # ASC10815

Specification

PIG-Y Antibody - Product Information

Application	**WB, IHC, IF**
Primary Accession	Q3MUY2
Other Accession	NP_116295, 14249680
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℃ for three months and -20℃, 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:16162815). May act by regulating the catalytic subunit PIGA (PubMed:16162815).

Cellular Location

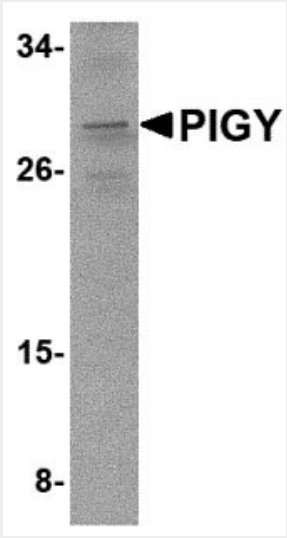
Endoplasmic reticulum membrane; Multi-pass membrane protein

PIG-Y Antibody - Protocols

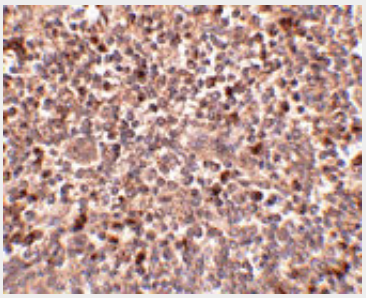
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PIG-Y Antibody - 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.

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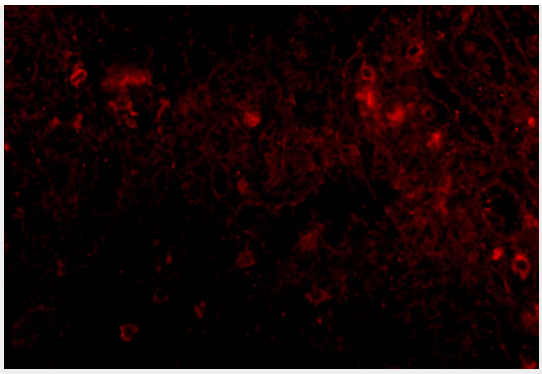

Immunofluorescence of PIGY in human spleen tissue with PIGY1 antibody at 20 µg/mL.

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. Bioessays2003; 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. Cell2005; 16:5236-46.