

**GPI8 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2462a****Specification**

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**GPI8 Antibody (N-term) - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">O92643</a>
Other Accession	<a href="#">O4KRV1</a> , <a href="#">O9CXY9</a> , <a href="#">O3MHZ7</a>
Reactivity	Human
Predicted	Bovine, Mouse, Pig
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	37-68

**GPI8 Antibody (N-term) - Additional Information****Gene ID** 10026**Other Names**

GPI-anchor transamidase, GPI transamidase, 3---, GPI8 homolog, hGPI8,  
Phosphatidylinositol-glycan biosynthesis class K protein, PIG-K, PIGK, GPI8

**Target/Specificity**

This GPI8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 37-68 amino acids from the N-terminal region of human GPI8.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100  
E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

GPI8 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**GPI8 Antibody (N-term) - Protein Information****Name** PIGK ([HGNC:8965](#))

**Function** Catalytic subunit of the glycosylphosphatidylinositol-anchor (GPI-anchor) transamidase (GPI-T) complex that catalyzes the formation of the linkage between a proprotein and a GPI-anchor and participates in GPI anchored protein biosynthesis (PubMed:[10793132](#), PubMed:[11483512](#), PubMed:[12582175](#), PubMed:[34576938](#), PubMed:[35165458](#), PubMed:[35551457](#), PubMed:[37684232](#), PubMed:[9356492](#)). Recognizes diverse proproteins at a C-terminal signal peptide (CSP) region that lacks consensus sequence and replaces it with a GPI-anchor via a transamidation reaction (PubMed:[35165458](#), PubMed:[35551457](#), PubMed:[37684232](#)). Transamidation catalysis reaction follows a two-phase mechanism (PubMed:[37684232](#)). In the acyl-enzyme phase, the carbonyl group of the proproteins's omega- site undergoes a nucleophilic attack forming an enzyme-substrate thioester bond (PubMed:[37684232](#)). Followed by a general acid catalysis that allows CSP releasing, regenerating the carbonyl, and forming the acyl-enzyme intermediate (PubMed:[37684232](#)). In the GPI-anchor attachment phase, the amino group of the GPI-anchor's ethanolamine phosphate, the one on third mannose (EtNP3), mediates a nucleophilic attack on the carbonyl of the acyl-enzyme intermediate, replacing the CSP, allowing GPI-anchor attachment to the omega-residue, therefore forming the product and freeing the enzyme (PubMed:[37684232](#)).

#### Cellular Location

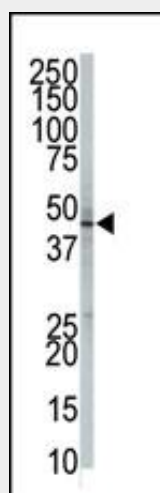
Endoplasmic reticulum membrane; Single-pass type I membrane protein

#### GPI8 Antibody (N-term) - Protocols

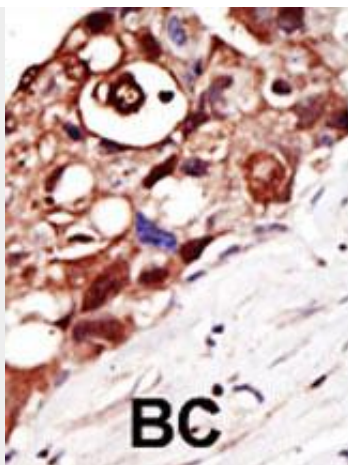
Provided below are standard protocols that you may find useful for product applications.

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

#### GPI8 Antibody (N-term) - Images



The anti-GPI8 Pab (Cat. #AP2462a) is used in Western blot to detect GPI8 in 293 cell lysate.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

#### **GPI8 Antibody (N-term) - Background**

GPI8 is a member of the cysteine protease family C13 that is involved in glycosylphosphatidylinositol (GPI)-anchor biosynthesis. The GPI-anchor is a glycolipid found on many blood cells and serves to anchor proteins to the cell surface. This protein is a member of the multisubunit enzyme, GPI transamidase and is thought to be its enzymatic component. GPI transamidase mediates GPI anchoring in the endoplasmic reticulum, by catalyzing the transfer of fully assembled GPI units to proteins.

#### **GPI8 Antibody (N-term) - References**

Ohishi, K., et al., J. Biol. Chem. 278(16):13959-13967 (2003). Vainauskas, S., et al., J. Biol. Chem. 277(34):30535-30542 (2002). Ohishi, K., et al., EMBO J. 20(15):4088-4098 (2001). Meyer, U., et al., Biochemistry 39(12):3461-3471 (2000). Yu, J., et al., Proc. Natl. Acad. Sci. U.S.A. 94(23):12580-12585 (1997).

#### **GPI8 Antibody (N-term) - Citations**

- [Profiling the expression pattern of GPI transamidase complex subunits in human cancer.](#)