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GP2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP13123a

Specification

GP2 Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P55259
Other Accession	NP_001007241.2, NP_001493.2, NP_001007243.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**59480**
Antigen Region	**55-84**

GP2 Antibody (N-term) - Additional Information

Gene ID 2813

Other Names
Pancreatic secretory granule membrane major glycoprotein GP2, Pancreatic zymogen granule membrane protein GP-2, ZAP75, GP2

Target/Specificity
This GP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 55-84 amino acids from the N-terminal region of human GP2.

Dilution
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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
GP2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GP2 Antibody (N-term) - Protein Information

Name GP2 (HGNC:4441)

Function Functions as an intestinal M-cell transcytotic receptor specific for type-I-piliated bacteria that participates in the mucosal immune response toward these bacteria. At the apical membrane of M- cells it binds fimH, a protein of the bacteria type I pilus tip. Internalizes bound bacteria, like E.coli and S.typhimurium, from the lumen of the intestine and delivers them, through M-cells, to the underlying organized lymphoid follicles where they are captured by antigen-presenting dendritic cells to elicit a mucosal immune response.

Cellular Location
Zymogen granule membrane {ECO:0000250|UniProtKB:P19218}; Lipid-anchor, GPI-anchor {ECO:0000250|UniProtKB:P19218}. Secreted Cell membrane {ECO:0000250|UniProtKB:P19218}; Lipid-anchor, GPI-anchor {ECO:0000250|UniProtKB:P19218}. Apical cell membrane {ECO:0000250|UniProtKB:Q9D733}; Lipid-anchor, GPI-anchor {ECO:0000250|UniProtKB:P19218}. Membrane raft {ECO:0000250|UniProtKB:P19218}; Lipid-anchor, GPI-anchor {ECO:0000250|UniProtKB:P19218}. Endosome {ECO:0000250|UniProtKB:Q9D733}. Note=Secreted, after cleavage, in the pancreatic juice.

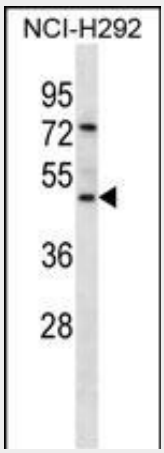
Tissue Location
Expressed in pancreas (at protein level) (PubMed:10760606, PubMed:8666297). Specifically expressed by M (microfold) cells which are atypical epithelial cells of the intestine (at protein level) (PubMed:19907495).

GP2 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 Cytomety
- Cell Culture

GP2 Antibody (N-term) - Images



GP2 Antibody (N-term) (Cat. #AP13123a) western blot analysis in NCI-H292 cell line lysates (35ug/lane).This demonstrates the GP2 antibody detected the GP2 protein (arrow).

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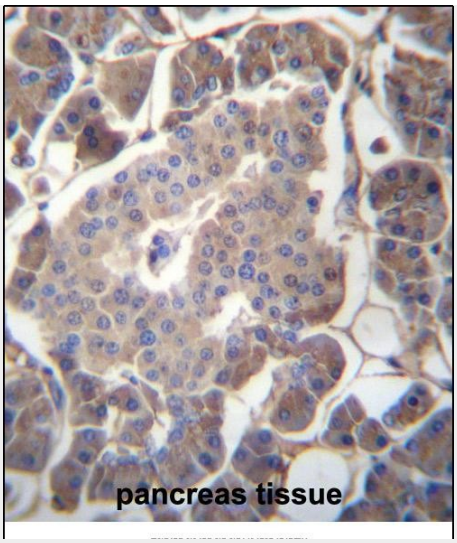

GP2 Antibody (N-term) (Cat. #AP13123a)immunohistochemistry analysis in formalin fixed and paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of GP2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

GP2 Antibody (N-term) - Background

The specific function of this protein remains unknown.

GP2 Antibody (N-term) - References

Kottgen, A., et al. Nat. Genet. 42(5):376-384(2010)
Masson, E., et al. Pancreas 39(3):353-358(2010)
Witt, H., et al. Pancreas 39(2):188-192(2010)
Boulling, A., et al. Mol. Genet. Metab. 99(3):319-324(2010)
Hase, K., et al. Nature 462(7270):226-230(2009)