

GP2 Antibody (N-term) Blocking Peptide

Synthetic peptide

Catalog # BP13123a

Specification

GP2 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P55259](#)**GP2 Antibody (N-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody AP13123a was selected from the N-term region of GP2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GP2 Antibody (N-term) Blocking Peptide - Protein InformationName 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

GP2 Antibody (N-term) Blocking Peptide - Images**GP2 Antibody (N-term) Blocking Peptide - Background**

The specific function of this protein remains unknown.

GP2 Antibody (N-term) Blocking Peptide - 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)