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TOLLIP Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP2163b

Specification

TOLLIP Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9H0E2

TOLLIP Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 54472

Other Names
Toll-interacting protein, TOLLIP

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2163b was selected from the C-term region of human TOLLIP . 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.

TOLLIP Antibody (C-term) Blocking Peptide - Protein Information

Name TOLLIP

Function
Component of the signaling pathway of IL-1 and Toll-like receptors (PubMed:10854325, PubMed:11751856). Inhibits cell activation by microbial products. Recruits IRAK1 to the IL-1 receptor complex (PubMed:10854325). Inhibits IRAK1 phosphorylation and kinase activity (PubMed:11751856). Connects the ubiquitin pathway to autophagy by functioning as a ubiquitin-ATG8 family adapter and thus mediating autophagic clearance of ubiquitin conjugates (PubMed:25042851). The TOLLIP-dependent selective autophagy pathway plays an important role in clearance of cytotoxic polyQ proteins aggregates (PubMed:<a href="http://www.uniprot.org/citations/25042851"

target="_blank">25042851). In a complex with TOM1, recruits ubiquitin-conjugated proteins onto early endosomes (PubMed:15047686). Binds to phosphatidylinositol 3-phosphate (PtdIns(3)P) (PubMed:26320582).

Cellular Location
Cytoplasm. Endosome. Early endosome Note=Localized to endo/exosomal vesicles

TOLLIP Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

TOLLIP Antibody (C-term) Blocking Peptide - Images

TOLLIP Antibody (C-term) Blocking Peptide - Background

Toll like protein is a component of the signaling pathway of IL1 and Toll like receptors. It inhibits cell activation by microbial products. Tollip recruits IRAK1 to the IL1 receptor complex and inhibits IRAK1 phosphorylation and kinase activity. It oligomerizes and binds to TLR2 and the TLR4-MD2 complex via its C terminus. It exists as a complex with IRAK1 in unstimulated cells. Upon IL1 signaling, Tollip binds to the activated IL1 receptor complex containing IL-1RI, IL-1RacP and the adapter protein MyD88, where it interacts with the TIR domain of IL-1RacP. MyD88 then triggers IRAK1 autophosphorylation, which in turn leads to the dissociation of IRAK1 from Tollip and IL-1RAcP. TOLLIP also interacts with TLR2 and TLR4; TOLLIP overexpression inhibits nuclear factor kappa-B (NFKB) activation in response to lipopolysaccharide and IL1B.

TOLLIP Antibody (C-term) Blocking Peptide - References

Zhang, G., et al., J. Biol. Chem. 277(9):7059-7065 (2002).Bulut, Y., et al., J. Immunol. 167(2):987-994 (2001).Burns, K., et al., Nat. Cell Biol. 2(6):346-351 (2000).Volpe, F., et al., FEBS Lett. 419(1):41-44 (1997).