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TOLLIP Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP2163c

Specification

TOLLIP Antibody (Center) Blocking Peptide - Product Information

Primary Accession	Q9H0E2
Other Accession	NP_061882

TOLLIP Antibody (Center) Blocking Peptide - Additional Information

Gene ID 54472

Other Names
Toll-interacting protein, TOLLIP

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2163c was selected from the Center 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 (Center) 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: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 (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

TOLLIP Antibody (Center) Blocking Peptide - Images

TOLLIP Antibody (Center) Blocking Peptide - Background

The Toll/IL1R (TIR) domain is highly conserved in the cytoplasmic regions of several molecules associated with innate immunity. The deduced 274-amino acid human TOLLIP protein, which is 97% identical to the mouse sequence, features a type II C2 motif. TOLLIP binds to IL1RAP, to a complex of IL1RAP-IL1R1, and to IL18R. TOLLIP-IL1R-associated kinase-1 (IRAK1) complexes appear to exist constitutively. Furthermore, TOLLIP recruits IRAK to the IL1R complex. The TOLLIP-IRAK1 complex is terminated by stimulation with IL1B and IRAK phosphorylation. TOLLIP also interacts with TLR2 and TLR4; TOLLIP overexpression inhibits nuclear factor kappa-B (NFKB) activation in response to lipopolysaccharide and IL1B.

TOLLIP Antibody (Center) 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).