

# **TOLLIP Antibody**

Catalog # ASC10395

# **Specification**

# **TOLLIP Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Application Notes

WB, IHC-P, IF, ICC, E Q9H0E2 AAH18272, 54472 Human, Mouse, Rat Rabbit Polyclonal IaG

TOLLIP antibody can be used for the detection of TOLLIP by Western blot at 1 - 2  $\mu$ g/mL. Antibody can also be used for immunohistochemistry starting at 5  $\mu$ g/mL and immunocytochemistry starting at 2  $\mu$ g/mL. For immunofluorescence start at 20  $\mu$ g/mL.

# **TOLLIP Antibody - Additional Information**

Gene ID **54472** 

**Other Names** 

TOLLIP Antibody: IL-1RAcPIP, Toll-interacting protein, toll interacting protein

#### Target/Specificity

TOLLIP antibody was raised against a 16 amino acid synthetic peptide from near the carboxy terminus of human TOLLIP.<br/>br><br/>br>The immunogen is located within the last 50 amino acids of TOLLIP.

# **Reconstitution & Storage**

TOLLIP antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

#### **Precautions**

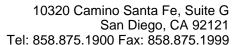
TOLLIP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **TOLLIP Antibody - Protein Information**

# **Name TOLLIP**

#### **Function**

Component of the signaling pathway of IL-1 and Toll-like receptors (PubMed:<a href="http://www.uniprot.org/citations/10854325" target="\_blank">10854325</a>, PubMed:<a href="http://www.uniprot.org/citations/11751856" target="\_blank">11751856</a>). Inhibits cell activation by microbial products. Recruits IRAK1 to the IL-1 receptor complex (PubMed:<a





href="http://www.uniprot.org/citations/10854325" target="\_blank">10854325</a>). Inhibits IRAK1 phosphorylation and kinase activity (PubMed:<a

href="http://www.uniprot.org/citations/11751856" target="\_blank">11751856</a>). Connects the ubiquitin pathway to autophagy by functioning as a ubiquitin-ATG8 family adapter and thus mediating autophagic clearance of ubiquitin conjugates (PubMed:<a

href="http://www.uniprot.org/citations/25042851" target="\_blank">25042851</a>). 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</a>). In a complex with TOM1, recruits ubiquitin-conjugated proteins onto early endosomes (PubMed:<a href="http://www.uniprot.org/citations/15047686" target="\_blank">15047686</a>). Binds to phosphatidylinositol 3-phosphate (PtdIns(3)P) (PubMed:<a href="http://www.uniprot.org/citations/26320582" target="\_blank">26320582</a>).

#### **Cellular Location**

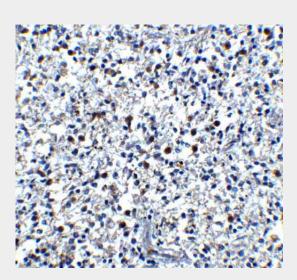
Cytoplasm. Endosome. Early endosome Note=Localized to endo/exosomal vesicles

# **TOLLIP Antibody - Protocols**

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

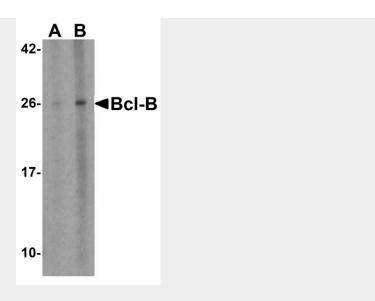
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **TOLLIP Antibody - Images**



Immunohistochemistry of Cathelicidin in human spleen tissue with Cathelicidin antibody at 5  $\mu$ g/ml.





Western blot analysis of Bcl-B in Jurkat cell lysate with Bcl-B antibody at (A) 1 and (B) 2  $\mu$ g/mL.

### **TOLLIP Antibody - Background**

TOLLIP Antibody: Toll-like receptors (TLRs) are evolutionarily conserved pattern-recognition molecules resembling the toll proteins that mediate antimicrobial responses in Drosophila. These proteins recognize different microbial products during infection and serve as an important link between the innate and adaptive immune responses. The TLRs act through adaptor molecules to activate various kinases and transcription factors so the organism can respond to potential infection. These adaptor molecules include TOLLIP, MyD88, and TRIF. TOLLIP associates directly with TLR2 and TLR 4, acting as an inhibitor to TLR activation. This negative regulation of TLR signaling may serve to limit the production of proinflammatory mediators during infection and inflammation.

# **TOLLIP Antibody - References**

Takeda K, Kaisho T, and Akira S. Toll-like receptors. Annu. Rev. Immunol.2003; 21:335-76. Janeway CA Jr. and Medzhitov R. Innate immune recognition. Annu. Rev. Immunol.2002; 20:197-216.

McGettrick AF and O'Neill LAJ. The expanding family of MyD88-like adaptors in Toll-like receptor signal transduction. Mol. Imm.2004; 41:577-82.

Zhang G and Ghosh S. Negative regulation of Toll-like receptor-mediated signaling by Tollip. J. Biol. Chem.2002; 277:7059-65.