

TOLLIP Antibody

Catalog # ASC10395

Product Information

Application WB, ICC, E **Primary Accession** Q9H0E2

Other AccessionAAH18272, 17390641ReactivityHuman, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype IgG
Calculated MW 30282
Concentration (mg/ml) 1 mg/mL
Conjugate Unconjugated

Application NotesTOLLIP antibody can be used for the detection of TOLLIP by Western blot at 1

- 2 [g/mL. Antibody can also be used for immunocytochemistry starting at 2

□g/mL.

Additional Information

Gene ID 54472

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

Target/Specificity 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.

PrecautionsTOLLIP Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

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

Background

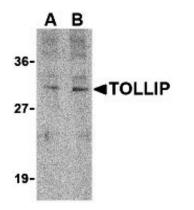
TOLLIP Antibody: Toll-like receptors (TLRs) are evolutionarily conserved pattern-recognition molecules resembling the toll proteins that mediate antimicrobial responses in Drosophila. These proteins recognize different microbial products during infection and serve as an important link between the innate 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.

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.

Images



Western blot analysis of TOLLIP in rat brain cell lysate with TOLLIP antibody at (A) 1 and (B) 2 $\mu g/mL$



Immunocytochemistry of TOLLIP in THP-1 cells with TOLLIP antibody at 2 μ g/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.