

Tollip (k1B17): sc-136152

BACKGROUND

Tollip (toll-interacting protein) serves as a suppressor of innate immunity signaling and links the serine/threonine kinase IRAK to the IL-1 receptor complex upon receptor activation. Overexpression of Tollip in HEK293 cells inhibits NF κ B activation in response to TLR2 and TLR4 signaling. Negative regulation of TLR signaling by Tollip may limit the production of proinflammatory mediators during inflammation and infection. Tollip forms a complex with Tom1 to regulate endosomal trafficking of ubiquitinated proteins. The Tollip protein shows ubiquitous expression in mouse.

REFERENCES

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2. Bulut, Y., et al. 2001. Cooperation of toll-like receptor 2 and 6 for cellular activation by soluble tuberculosis factor and *Borrelia burgdorferi* outer surface protein A lipoprotein: role of toll-interacting protein and IL-1 receptor signaling molecules in toll-like receptor 2 signaling. *J. Immunol.* 167: 987-994.
3. Zhang, G. and Ghosh, S. 2002. Negative regulation of toll-like receptor-mediated signaling by Tollip. *J. Biol. Chem.* 277: 7059-7065.
4. Katoh, Y., et al. 2004. Tollip and Tom1 form a complex and recruit ubiquitin-conjugated proteins onto early endosomes. *J. Biol. Chem.* 279: 24435-24443.
5. Li, T., et al. 2004. Characterization of Tollip protein upon lipopolysaccharide challenge. *Mol. Immunol.* 41: 85-92.
6. Ohnuma, K., et al. 2005. CD26 mediates dissociation of Tollip and IRAK-1 from caveolin-1 and induces upregulation of CD86 on antigen-presenting cells. *Mol. Cell. Biol.* 25: 7743-7757.
7. Katoh, Y., et al. 2006. Recruitment of clathrin onto endosomes by the Tom1-Tollip complex. *Biochem. Biophys. Res. Commun.* 341: 143-149.
8. Didierlaurent, A., et al. 2006. Tollip regulates proinflammatory responses to interleukin-1 and lipopolysaccharide. *Mol. Cell. Biol.* 26: 735-742.
9. Schimming, T.T., et al. 2007. Association of toll-interacting protein gene polymorphisms with atopic dermatitis. *BMC Dermatol.* 7: 3.

CHROMOSOMAL LOCATION

Genetic locus: TOLLIP (human) mapping to 11p15.5.

SOURCE

Tollip (k1B17) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 61-274 of Tollip of human origin.

PRODUCT

Each vial contains 50 μ g IgG_{2a} in 0.5 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

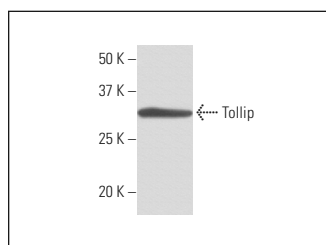
Tollip (k1B17) is recommended for detection of Tollip of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Tollip siRNA (h): sc-63332, Tollip shRNA Plasmid (h): sc-63332-SH and Tollip shRNA (h) Lentiviral Particles: sc-63332-V.

Molecular Weight of Tollip: 28 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or SK-N-MC cell lysate: sc-2237.

DATA



Tollip (k1B17): sc-136152. Western blot analysis of Tollip expression in Jurkat whole cell lysate.

SELECT PRODUCT CITATIONS

1. Ahmed, M., et al. 2018. Functional linkage of RKIP to the epithelial to mesenchymal transition and autophagy during the development of prostate cancer. *Cancers* 10: 273.
2. Ahmed, M., et al. 2019. Colocr: an R package for conducting co-localization analysis on fluorescence microscopy images. *PeerJ* 7: e7255.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.