

TIRAP Antibody

Catalog # ASC10201

Specification

TIRAP Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

ICC <u>P58753</u> <u>NP_473437</u>, <u>114609</u> Human, Mouse, Rat Rabbit Polyclonal IgG Predicted: 24, 26, 38 kDa

Observed: 35 kDa KDa TIRAP antibody can be used for detection of TIRAP by Western blot at 1 to 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2 μ g/mL. For immunofluorescence start at 10 μ g/mL.

Application Notes

TIRAP Antibody - Additional Information

Gene ID **114609** Other Names TIRAP Antibody: Mal, wyatt, BACTS1, MyD88-2, MAL, Adaptor protein Wyatt, TIR domain-containing adapter protein, toll-interleukin 1 receptor (TIR) domain containing adaptor protein

Target/Specificity

TIRAP antibody was raised against a peptide corresponding to 15 amino acids near the C-terminus of mouse TIRAP.

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The immunogen is located within the last 50 amino acids of TIRAP.

Reconstitution & Storage

TIRAP 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

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

TIRAP Antibody - Protein Information

Name TIRAP

Synonyms MAL

Function

Adapter involved in TLR2, TLR4 and RAGE signaling pathways in the innate immune response. Acts



via IRAK2 and TRAF-6, leading to the activation of NF-kappa-B, MAPK1, MAPK3 and JNK, and resulting in cytokine secretion and the inflammatory response. Positively regulates the production of TNF-alpha (TNF) and interleukin-6 (IL6).

Cellular Location

Cytoplasm. Cell membrane. Membrane. Note=Colocalizes with DAB2IP at the plasma membrane

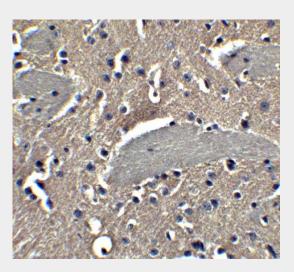
Tissue Location

Highly expressed in liver, kidney, spleen, skeletal muscle and heart. Also detected in peripheral blood leukocytes, lung, placenta, small intestine, thymus, colon and brain

TIRAP Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- **TIRAP Antibody Images**



Immunocytochemistry of NPTX2 in mouse brain tissue with NPTX2 antibody at 5 $\mu\text{g/ml}.$

TIRAP Antibody - Background

TIRAP Antibody: Toll-like receptors (TLRs) are signaling molecules that recognize different microbial products during infection and serve as an important link between the innate and adaptive immune responses. These proteins act through adaptor molecules such as TIRAP and MyD88 to activate various kinases and transcription factors. In TIRAP-deficient mice, TLR signaling in response to TLR2 ligands (using either TLR1 and TLR6 as co-receptors) is totally abolished, suggesting that MyD88 and TIRAP work together and are both required for TLR2 signaling. Furthermore, these mice are also resistant to the toxic effects of LPS and show defects in NF-kappaB and MAP kinase activation, suggesting that TIRAP is also involed in TLR4 signaling.



TIRAP Antibody - References

Vogel SN, Fitzgerald KA, and Fenton MJ. TLRs: differential adapter utilization by toll-like receptors mediates TLR-specific patterns of gene expression. Mol. Interv. 2003; 3:466-77. 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. O'Neill LAJ, Fitzgerald FA, and Bowie AG. The Toll-IL-1 receptor adaptor family grows to five members. Trends in Imm. 2003; 24:286-9.