

# TIRAP Antibody

Catalog # ASC10200

## Specification

# TIRAP Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes

WB, IHC-P, IF, E <u>P58753</u> <u>AAL05627</u>, <u>15705407</u> Human Rabbit Polyclonal IgG TIRAP antibody can be used for detection of TIRAP by Western blot at 4 μg/mL. Antibody can also be used for immunohistochemistry starting at 20 μg/mL. For immunofluorescence start at 2 μg/mL.

## 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;

#### **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** 

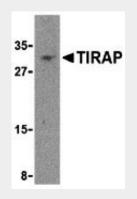
Highly expressed in liver, kidney, spleen, skeletal muscle and heart. Also detected in peripheral blood leukocytes, lung, placenta, small intestine, thymus, colon and brain

## **TIRAP Antibody - Protocols**

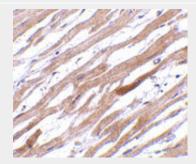
Provided below are standard protocols that you may find useful for product applications.

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

# TIRAP Antibody - Images

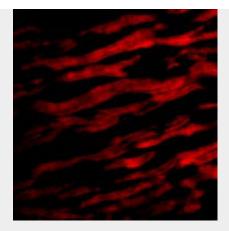


Western blot analysis of TIRAP in MCF-7 cell lysate with TIRAP antibody at 4  $\mu$ g/mL.



Immunohistochemistry of TIRAP in human heart tissue with TIRAP antibody at 20  $\mu$ g/mL.





Immunofluorescence of TIRAP in Human Heart cells with TIRAP antibody at 20  $\mu$ 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-κB 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.