

TIRAP Antibody

Catalog # ASC10201

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	P58753
Other Accession	NP_473437 , 15705407
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	23883
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TIRAP antibody can be used for detection of TIRAP by Western blot at 0.5 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.

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; At least three isoforms of TIRAP are known to exist; this antibody detects all three isoforms.
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.

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 (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

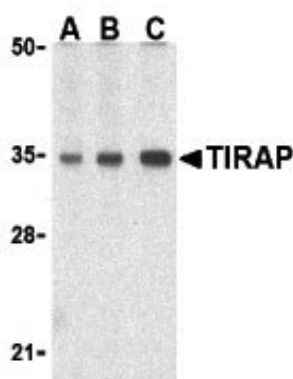
Background

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 involved in TLR4 signaling.

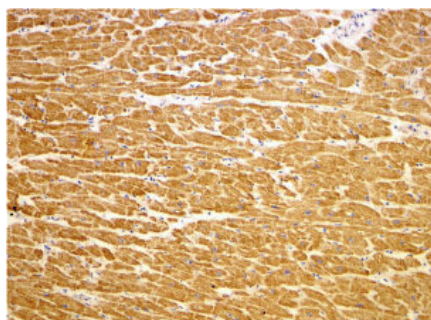
References

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.

Images

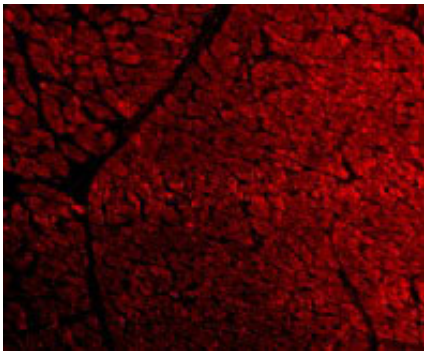


Western blot analysis of TIRAP in human heart cell lysate with TIRAP antibody at (A) 0.5, (B) 1, and (C) 2 µg/mL.



Immunohistochemical staining of human heart tissue using TIRAP antibody at 2 µg/mL.

Immunofluorescence of TIRAP in Human Heart tissue with TIRAP antibody at 10 µg/mL.



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