Rabbit anti-Human, Rat TIRAP Polyclonal Antibody | anti-TIRAP antibody

Phospho-TIRAP (Tyr106) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329267	**Rabbit**	**Human, Rat**	**ELISA, Immunocytochemistry, Immunofluorescence**

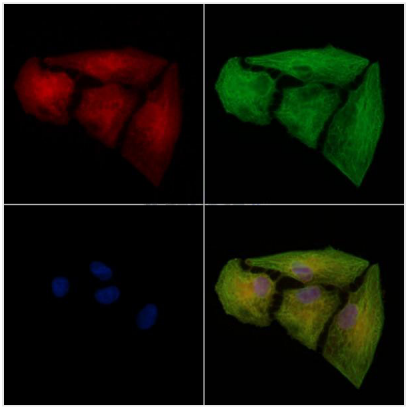
PRODUCT SYNONYMS

TIRAP; Polyclonal Antibody; Phospho-TIRAP (Tyr106) Antibody; Adapter protein wyatt; FLJ42305; MAL; MyD88 adapter like protein; TIR domain containing adapter protein; Toll interleukin 1 receptor (TIR) domain containing adaptor protein; Toll interleukin 1 receptor domain containing adapter protein; Toll like receptor adaptor protein; Wyatt; anti-TIRAP antibody

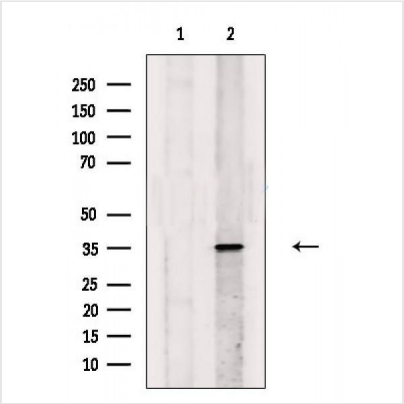
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-TIRAP (Tyr106) Antibody detects endogenous levels of TIRAP only when phosphorylated at Tyr106. Tissue Specificity: Highly expressed in liver, kidney, spleen, skeletal muscle and heart. Also detected in peripheral blood leukocytes, lung, placenta, small intestine, thymus, colon and brain.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-TIRAP antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence)
Immunogen	A synthesized peptide derived from human TIRAP around the phosphorylation site of Tyr106.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Phosphorylated by IRAK1 and IRAK4. Also phosphorylated by BTK.Polyubiquitinated. Polyubiquitination follows phosphorylation by BTK and leads to TIRAP degradation.
Subunit Structure	Homodimer. Also forms heterodimers with MYD88. May interact with PIK3AP1 (By similarity). Interacts with TLR4 and IRAK2 via their respective TIR domains. Interacts with BMX and TBK1. Interacts with EIF2AK2. Does not interact with IRAK1, nor TLR9. (Microbial infection) In case of infection, interacts with Brucella protein BtpA.
Subcellular Location	Cytoplasm. Cell membrane. Membrane. Note: Colocalizes with DAB2IP at the plasma membrane.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)
Staining A549 cells(heat shock treatment) by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25 degree C. Samples were then incubated with primary Ab(AF3648) and mouse anti-beta tubulin Ab(T0023) for 1 hour at 37 degree C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody.The nuclear counter stain is DAPI (blue).



WB (Western Blot)
Western blot analysis of extracts from Rat heart, using Phospho-TIRAP (Tyr106) Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-TIRAP antibody	Adapter involved in TLR2 and TLR4 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 and interleukin-6.

NCBI AND UNIPROT INFORMATION

NCBI GI #	89111122
NCBI GeneID	114609
NCBI Accession #	NP_001034750.1
NCBI GenBank Nucleotide #	NM_001039661.1
UniProt Accession #	P58753; Q56UH9; Q56UI0; Q8N5E5; B3KW65
Molecular Weight	23,883 Da
NCBI Official Full Name	toll/interleukin-1 receptor domain-containing adapter protein isoform a
NCBI Official Synonym Full Names	toll-interleukin 1 receptor (TIR) domain containing adaptor protein
NCBI Official Symbol	TIRAP
NCBI Official Synonym Symbols	Mal; wyatt; BACTS1; MyD88-2
NCBI Protein Information	toll/interleukin-1 receptor domain-containing adapter protein; adapter protein wyatt; adaptor protein Wyatt; MyD88 adapter-like protein; Toll-like receptor adaptor protein
UniProt Protein Name	Toll/interleukin-1 receptor domain-containing adapter protein
UniProt Gene Name	**TIRAP**
UniProt Synonym Gene Names	MAL; TIR domain-containing adapter protein; MyD88-2
UniProt Entry Name	TIRAP_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.