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TIRAP Rabbit pAb

Catalog # AP99186

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P58753
Other Accession	P58753
Reactivity	Human, Mouse
Predicted	Rat, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23883
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TIRAP
Epitope Specificity	81-221/221
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 TIR domain.
SUBUNIT	Homodimer. Also forms heterodimers with MyD88. Binds to TLR4 and IRAK2 via their respective TIR domains. Binds to BMX, PKR and TBK1. Does not interact with IRAK1, nor TLR9.
Post-translational modifications	Phosphorylated by IRAK1 and IRAK4. Also phosphorylated by BTK. Polyubiquitinated. Polyubiquitination follows phosphorylation by BTK and leads to TIRAP degradation.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The Toll-like receptor (TLR) family in mammals comprises a family of transmembrane proteins characterized by multiple copies of leucine rich repeats in the extracellular domain and IL-1 receptor motif in the cytoplasmic domain. Like its counterparts in Drosophila, TLRs signal through adaptor molecules. The TLR family is a phylogenetically conserved mediator of innate immunity that is essential for microbial recognition. Ten human homologs of TLRs (TLR1-10) have been described. TIRAP (TIR domain-containing adaptor protein) is an adaptor protein used by TLR4. Blocking TIRAP inhibits TLR4-mediated signaling events, including DC maturation and cytokine production.

Additional Information

Gene ID	114609
Other Names	BACTS1; Mal; MyD88-2; wyatt; C130027E04Rik; Tlr4ap; TIRAP_HUMAN; TIRAP; TIR domain-containing adapter protein; Adaptor protein Wyatt; MyD88 adapter-like protein (MyD88-2); TIRAP_MOUSE; MyD88 adapter-like protein; TIR domain containing adaptor protein; Toll-interleukin 1 receptor (TIR) domain-containing adaptor protein; MyD88 adapter-like

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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