10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TOM1 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI13362

Product Information

Application	WB
Primary Accession	O60784
Other Accession	NM_005488, NP_005479
Reactivity	Human, Mouse, Rat, Rabbit, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Chicken, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53818

Additional Information

Gene ID	10043
Alias Symbol	FLJ33404
Other Names	Target of Myb protein 1, TOM1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-TOM1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	TOM1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TOM1 (HGNC:11982)
Function	Adapter protein that plays a role in the intracellular membrane trafficking of ubiquitinated proteins, thereby participating in autophagy, ubiquitination-dependent signaling and receptor recycling pathways (PubMed:14563850, PubMed:15047686, PubMed:23023224, PubMed:25588840, PubMed:26320582, PubMed:31371777). Acts as a MYO6/Myosin VI adapter protein that targets MYO6 to endocytic structures (PubMed:23023224). Together with MYO6, required for autophagosomal delivery of endocytic cargo, the maturation of autophagosomes and their fusion with lysosomes (PubMed:23023224). MYO6 links TOM1 with autophagy receptors, such as TAX1BP1; CALCOCO2/NDP52 and OPTN (PubMed:31371777). Binds to polyubiquitinated proteins via its GAT domain

(PubMed:14563850). In a complex with TOLLIP, recruits ubiquitin-conjugated proteins onto early endosomes (PubMed:15047686). The Tom1-Tollip complex may regulate endosomal trafficking by linking polyubiquitinated proteins to clathrin (PubMed:14563850, PubMed:15047686). Mediates clathrin recruitment to early endosomes by ZFYVE16 (PubMed:15657082). Modulates binding of TOLLIP to phosphatidylinositol 3-phosphate (PtdIns(3)P) via binding competition; the association with TOLLIP may favor the release of TOLLIP from endosomal membranes, allowing TOLLIP to commit to cargo trafficking (PubMed:26320582). Acts as a phosphatidylinositol 5-phosphate (PtdIns(5)P) effector by binding to PtdIns(5)P, thereby regulating endosomal maturation (PubMed:25588840). PtdIns(5)P-dependent recruitment to signaling endosomes may block endosomal maturation (PubMed:25588840). Also inhibits Toll-like receptor (TLR) signaling and participates in immune receptor recycling (PubMed:15047686, PubMed:26320582).

Cellular Location

Cytoplasm. Endosome membrane; Peripheral membrane protein. Early endosome membrane; Peripheral membrane protein. Note=Localized to endo/exosomal vesicles (PubMed:31263572). Enriched on signaling endosomes (PubMed:25588840). Recruited to early endosomes by TOLLIP and by PtdIns(5)P (PubMed:15047686, PubMed:25588840, PubMed:26320582)

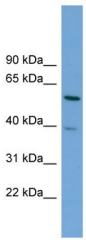
Tissue Location

Widely expressed. Highly expressed in skeletal muscle, heart, placenta and liver.

References

Seroussi E.,et al.Genomics 57:380-388(1999).
Collins J.E.,et al.Genome Biol. 5:R84.1-R84.11(2004).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Dunham I.,et al.Nature 402:489-495(1999).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

Images



WB Suggested Anti-TOM1 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:1562500
Positive Control: U937 cell lysate

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