

# TOM1 antibody - middle region

Rabbit Polyclonal Antibody

Catalog # AI13362

## Product Information

|                   |                                                                    |
|-------------------|--------------------------------------------------------------------|
| Application       | WB                                                                 |
| Primary Accession | <a href="#">O60784</a>                                             |
| Other Accession   | <a href="#">NM_005488</a> , <a href="#">NP_005479</a>              |
| 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 ( <a href="#">HGNC:11982</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 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: <a href="#">14563850</a> , PubMed: <a href="#">15047686</a> , PubMed: <a href="#">23023224</a> , PubMed: <a href="#">25588840</a> , PubMed: <a href="#">26320582</a> , PubMed: <a href="#">31371777</a> ). Acts as a MYO6/Myosin VI adapter protein that targets MYO6 to endocytic structures (PubMed: <a href="#">23023224</a> ). Together with MYO6, required for autophagosomal delivery of endocytic cargo, the maturation of autophagosomes and their fusion with lysosomes (PubMed: <a href="#">23023224</a> ). MYO6 links TOM1 with autophagy receptors, such as TAX1BP1; CALCOCO2/NDP52 and OPTN (PubMed: <a href="#">31371777</a> ). 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)

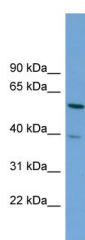
#### Tissue Location

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'.