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Anti-TOM20 Antibody

Catalog # AP59783

Product Information

Application	WB, IF/IC
Primary Accession	Q15388
Reactivity	Human, Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	16298

Additional Information

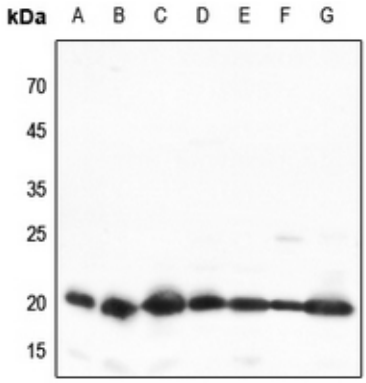
Gene ID	9804
Other Names	KIAA0016; Mitochondrial import receptor subunit TOM20 homolog; Mitochondrial 20 kDa outer membrane protein; Outer mitochondrial membrane receptor Tom20
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human TOM20. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

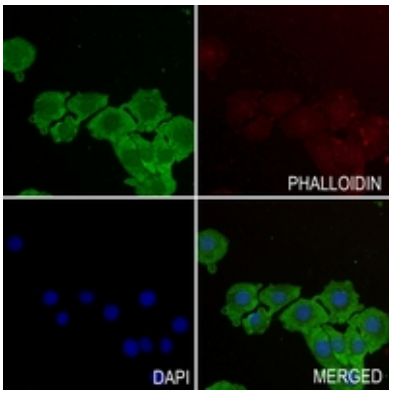
Name	TOMM20
Synonyms	KIAA0016
Function	Central receptor component of the translocase of the outer membrane of mitochondria (TOM) complex essential for the recognition and translocation of cytosolically synthesized mitochondrial preproteins (PubMed:40080546). Together with TOMM22 functions as the transit peptide receptor at the surface of the mitochondrion outer membrane and facilitates the movement of preproteins into the TOM40 translocation pore (PubMed:18331822). The TOM complex associates with the ion channel VDAC2 and PINK1 kinase at depolarized mitochondria, this interaction stabilizes PINK1 at the outer mitochondrial membrane and triggers downstream mitophagy by the recruitment of the E3 ubiquitin ligase PRKN (PubMed:40080546). Required for the translocation across the mitochondrial outer membrane of cytochrome P450 monooxygenases (By similarity).

Cellular Location	Mitochondrion outer membrane; Single-pass membrane protein

Images



Western blot analysis of TOM20 expression in HEK293T (A), Hela (B), H460 (C), mouse lung (D), mouse spleen (E), mouse kidney (F), rat spleen (G) whole cell lysates. (Predicted band size: 16 kD; Observed band size: 20 kD)



Immunofluorescent analysis of TOM20 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Citations

- Mitochondrial transplantation reduces lower limb ischemia-reperfusion injury by increasing skeletal muscle energy and adipocyte browning

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