

Product datasheet for **TA378802**

E3 ubiquitin protein ligase MUL1 (MUL1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB,1:1000 - 1:2000
Reactivity:	Human, Mouse
Modifications:	Unmodified
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 1-352 of human MUL1 (NP_078820.2).
Formulation:	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	39kDa
Gene Name:	mitochondrial E3 ubiquitin protein ligase 1
Database Link:	Entrez Gene 79594 Human Q969V5



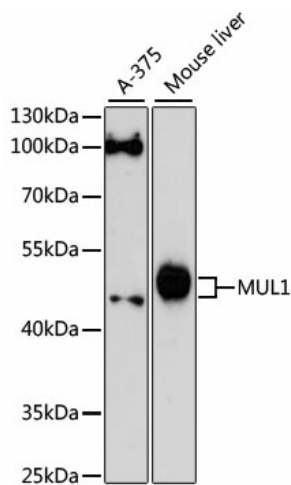
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Background:

Exhibits weak E3 ubiquitin-protein ligase activity. E3 ubiquitin ligases accept ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfer the ubiquitin to targeted substrates. Can ubiquitinate AKT1 preferentially at 'Lys-284' involving 'Lys-48'-linked polyubiquitination and seems to be involved in regulation of Akt signaling by targeting phosphorylated Akt to proteosomal degradation. Mediates polyubiquitination of cytoplasmic TP53 at 'Lys-24' which targets TP53 for proteasomal degradation, thus reducing TP53 levels in the cytoplasm and mitochondrion. Proposed to preferentially act as a SUMO E3 ligase at physiological concentrations. Plays a role in the control of mitochondrial morphology by promoting mitochondrial fragmentation, and influences mitochondrial localization. Likely to promote mitochondrial fission through negatively regulating the mitochondrial fusion proteins MFN1 and MFN2, acting in a pathway that is parallel to the PRKN/PINK1 regulatory pathway. May also be involved in the sumoylation of the membrane fission protein DNM1L. Inhibits cell growth. When overexpressed, activates JNK through MAP3K7/TAK1 and induces caspase-dependent apoptosis. Involved in the modulation of innate immune defense against viruses by inhibiting DDX58-dependent antiviral response. Can mediate DDX58 sumoylation and disrupt its polyubiquitination.

Synonyms:

C1orf166; FLJ12875; GIDE; MAPL; MULAN; RNF218; RP11-401M16.2

Product images:

Western blot analysis of extracts of various cell lines, using MUL1 antibody (TA378802) at 1:3000 dilution. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% nonfat dry milk in TBST. | Detection: ECL Enhanced Kit. | Exposure time: 90s.