Anti-MUL1 antibody

Description	Unconjugated Rabbit polyclonal to MUL1

Model	STJ191920
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, WB
Gene ID	79594
Gene Symbol	MUL1
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	MUL1 Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Widely expressed with highest levels in the heart, skeletal muscle, placenta, kidney and liver. Barely detectable in colon and thymus.
Purification	MUL1 antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Mitochondrial ubiquitin ligase activator of NFKB 1 E3 SUMO-protein ligase MUL1 E3 ubiquitin-protein ligase MUL1 Growth inhibition and death E3 ligase Mitochondrial-anchored protein ligase MAPL Putative NF-kappa-B-activa
Molecular Weight	38 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol,and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:25762OMIM:612037
Alternative Names	Mitochondrial ubiquitin ligase activator of NFKB 1 E3 SUMO-protein ligase MUL1 E3 ubiquitin-protein ligase MUL1 Growth inhibition and death E3 ligase Mitochondrial-anchored protein ligase MAPL Putative NF-kappa-B-activa
Function	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. Proposed to preferentially act as a SUMO E3 ligase at physiological concentrations. Plays a role in the control of mitochondrial morphology. Promotes mitochondrial fragmentation and influences mitochondrial localization. The function may implicate its ability to sumoylate 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.
Sequence and Domain Family	The zinc finger domain is required for E3 ligase activity.
Cellular Localization	Mitochondrion outer membrane. Multi-pass membrane protein. Peroxisome. Transported in mitochondrion-derived vesicles from the mitochondrion to the peroxisome.
Post-translational Modifications	Ubiquitinated by PRKN during mitophagy, leading to its degradation and enhancement of mitophagy. Deubiquitinated by USP30.