

MUL1 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP12811b**Specification**

MUL1 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q969V5](#)**MUL1 Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 79594**Other Names**

Mitochondrial ubiquitin ligase activator of NFKB 1, 632-, 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-activating protein 266, RING finger protein 218, MUL1, C1orf166, GIDE, MAPL, MULAN, RNF218

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MUL1 Antibody (C-term) Blocking peptide - Protein Information**Name** MUL1**Synonyms** C1orf166, GIDE, MAPL, MULAN, RNF218**Function**

Exhibits weak E3 ubiquitin-protein ligase activity (PubMed:18591963, PubMed:19407830, PubMed:22410793). 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 (PubMed:18591963, PubMed:19407830, PubMed:22410793). 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 proteasomal degradation (PubMed:22410793). Mediates polyubiquitination of cytoplasmic TP53 at 'Lys-24'

which targets TP53 for proteasomal degradation, thus reducing TP53 levels in the cytoplasm and mitochondrion (PubMed:21597459). Proposed to preferentially act as a SUMO E3 ligase at physiological concentrations (PubMed:19407830). Plays a role in the control of mitochondrial morphology by promoting mitochondrial fragmentation, and influences mitochondrial localization (PubMed:18207745, PubMed:18213395, PubMed:19407830). 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 (PubMed:24898855). May also be involved in the sumoylation of the membrane fission protein DNM1L (PubMed:18207745, PubMed:19407830). Inhibits cell growth (PubMed:18591963, PubMed:22410793). When overexpressed, activates JNK through MAP3K7/TAK1 and induces caspase-dependent apoptosis (PubMed:23399697). Involved in the modulation of innate immune defense against viruses by inhibiting RIGI-dependent antiviral response (PubMed:23399697). Can mediate RIGI sumoylation and disrupt its polyubiquitination (PubMed:23399697).

Cellular Location

Mitochondrion outer membrane; Multi-pass membrane protein. Peroxisome. Note=Transported in mitochondrion- derived vesicles from the mitochondrion to the peroxisome

Tissue Location

Widely expressed with highest levels in the heart, skeletal muscle, placenta, kidney and liver. Barely detectable in colon and thymus.

MUL1 Antibody (C-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

MUL1 Antibody (C-term) Blocking peptide - Images

MUL1 Antibody (C-term) Blocking peptide - Background

E3 ubiquitin-protein ligase that plays a role in the control of mitochondrial morphology. Promotes mitochondrial fragmentation and influences mitochondrial localization. Inhibits cell growth. When overexpressed, activates JNK through MAP3K7/TAK1 and induces caspase-dependent apoptosis. 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.

MUL1 Antibody (C-term) Blocking peptide - References

Laure, L., et al. FEBS J. 277(20):4322-4337(2010)Braschi, E., et al. EMBO Rep. 10(7):748-754(2009)Venkatesan, K., et al. Nat. Methods 6(1):83-90(2009)Zhang, B., et al. Cell Res. 18(9):900-910(2008)Zhang, H., et al. Biochem. Biophys. Res. Commun. 366(4):898-904(2008)