# UFL1 Mouse mAb

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| **Catalog No** | YP-mAb-19196 |
| **Isotype** | IgG |
| **Reactivity** | Human;Mouse;Rat |
| **Applications** | WB |
| **Gene Name** | UFL1 KIAA0776 NLBP |
| **Protein Name** | E3 UFM1-protein ligase 1 (LZAP-binding protein) |
| **Immunogen** | Synthesized peptide derived from human UFL1 |
| **Specificity** | This antibody detects endogenous levels of UFL1 at Human, Mouse,Rat |
| **Formulation** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |
| **Source** | Monoclonal,Mouse,IgG |
| **Purification** | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen. |
| **Dilution** | WB 1:500-2000 |
| **Concentration** | 1 mg/ml |
| **Purity** | ≥90% |
| **Storage Stability** | -20°C/1 year |
| **Synonyms** | |
| **Observed Band** | |
| **Calculated Molecular Weight** | 87kD |
| **Cell Pathway** | Endoplasmic reticulum membrane . Cytoplasm, cytosol . Nucleus . Chromosome . Recruited to double-strand breaks by the MRE11-RAD50-NBN (MRN) complex following DNA damage. . |
| **Tissue Specificity** | Ubiquitously expressed, with a high expression in liver (at protein level) (PubMed:20018847). Low expression in several invasive hepatocellular carcinomas, such Hep-G2, Hep 3B2.1-7, HLE and PLC (PubMed:20018847). |
| **Function** | E3 protein ligase that mediates ufmylation, the covalent attachment of the ubiquitin-like modifier UFM1 to lysine residues on target proteins, and which plays a key role in reticulophagy (also called ER-phagy) induced in response to endoplasmic reticulum stress . In response to endoplasmic reticulum stress, recruited to the endoplasmic reticulum membrane by DDRGK1, and mediates ufmylation of proteins such as RPN1 and RPL26/uL24, thereby promoting reticulophagy of endoplasmic reticulum sheets . Ufmylation-dependent reticulophagy inhibits the unfolded protein response (UPR) via ERN1/IRE1-alpha . Ufmylation in response to endoplasmic reticulum stress is essential for processes such as hematopoiesis, blood vessel morphogenesis or inflammatory response . Regulates inflammation in response to endoplasmic reticulum stress by promoting |

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| | reticulophagy, leading to inhibit the activity of the NF-kappa-B transcription factor (By similarity). Mediates ufmylation of DDRGK1 and CDK5RAP3; the role of these modifications is however unclear: as both DDRGK1 and CDK5RAP3 act as substrate adapters for ufmylation, it is uncertain whether ufmylation of these proteins is a collateral effect or is required for ufmylation . Catalyzes ufmylation of various subunits of the ribosomal complex or associated components, such as RPS3/uS3, RPS20/uS10, RPL10/uL16, RPL26/uL24 and EIF6 (By similarity). Anchors CDK5RAP3 in the cytoplasm, preventing its translocation to the nucleus which allows expression of the CCND1 cyclin and progression of cells through the G1/S transition . Also involved in the response to DNA damage: recruited to double-strand break sites following DNA damage and mediates monoufmylation of histone H4 . Catalyzes ufmylation of TRIP4, thereby playing a role in nuclear receptor-mediated transcription . Required for hematopoietic stem cell function and hematopoiesis (By similarity). Required for cardiac homeostasis (By similarity). |
| **Background** | |
| **matters needing attention** | Avoid repeated freezing and thawing! |
| **Usage suggestions** | This product can be used in immunological reaction related experiments. For more information, please consult technical personnel. |

## Products Images