



# UFL1 Mouse mAb

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| <b>Catalog No</b>                  | YP-mAb-19196                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Gene Name</b>                   | UFL1 KIAA0776 NLBP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Immunogen</b>                   | Synthesized peptide derived from human UFL1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>                 | This antibody detects endogenous levels of UFL1 at Human, Mouse,Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Source</b>                      | Monoclonal,Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Dilution</b>                    | WB 1:500-2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Synonyms</b>                    | NLBP;RCAD;Maxer;KIAA0776;UFL1;UFL1 KIAA0776 NLBP;E3 UFM1-protein ligase 1 (LZAP-binding protein)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Observed Band</b>               | 90kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Calculated Molecular Weight</b> | 90kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Cell Pathway</b>                | Endoplasmic reticulum membrane . Cytoplasm, cytosol . Nucleus . Chromosome . Recruited to double-strand breaks by the MRE11-RAD50-NBN (MRN) complex following DNA damage. .                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Tissue Specificity</b>          | 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).                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Function</b>                    | 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 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