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K0776 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9677c

Specification

K0776 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	O94874
Other Accession	B2GV24
Reactivity	**Human**
Predicted	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**89595**
Antigen Region	**426-455**

K0776 Antibody (Center) - Additional Information

Gene ID 23376

Other Names
E3 UFM1-protein ligase 1, 632-, LZAP-binding protein, UFL1, KIAA0776, NLBP

Target/Specificity
This K0776 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 426-455 amino acids from the Central region of human K0776.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
K0776 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

K0776 Antibody (Center) - Protein Information

Name UFL1 (HGNC:23039)

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 (PubMed:20018847, PubMed:20164180, PubMed:20228063, PubMed:25219498, PubMed:32160526, PubMed:37311461). 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 (PubMed:32160526). Ufmylation-dependent reticulophagy inhibits the unfolded protein response (UPR) via ERN1/IRE1-alpha (PubMed:23152784, PubMed:32160526). Ufmylation in response to endoplasmic reticulum stress is essential for processes such as hematopoiesis, blood vessel morphogenesis or inflammatory response (PubMed:32050156). 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 (PubMed:20531390, PubMed:20018847). 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 (PubMed:20531390). Also involved in the response to DNA damage: recruited to double-strand break sites following DNA damage and mediates monoufmylation of histone H4 (PubMed:30886146). Catalyzes ufmylation of TRIP4, thereby playing a role in nuclear receptor- mediated transcription (PubMed:25219498). Required for hematopoietic stem cell function and hematopoiesis (By similarity). Required for cardiac homeostasis (By similarity).

Cellular Location
Endoplasmic reticulum membrane. Cytoplasm, cytosol Nucleus. Chromosome. Note=Recruited to double-strand breaks by the MRE11-RAD50-NBN (MRN) complex following DNA damage

Tissue Location
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).

K0776 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

K0776 Antibody (Center) - Images

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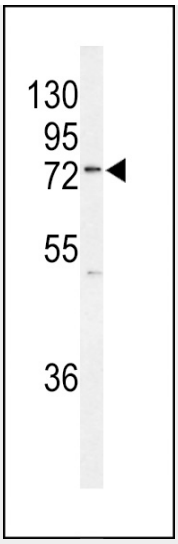

Western blot analysis of K0776 Antibody (Center) (Cat. #AP9677c) in MCF-7 cell line lysates (35ug/lane). K0776 (arrow) was detected using the purified Pab.

K0776 Antibody (Center) - References

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