

UBR4 / ZUBR1 Antibody (C-Term)

Peptide-affinity purified goat antibody Catalog # AF3012a

Specification

UBR4 / ZUBR1 Antibody (C-Term) - Product Information

Application IHC, E **Primary Accession 05T4S7**

NP_065816.2, 23352, 69116 (mouse), 313658 Other Accession

Reactivity Human

Predicted Mouse, Rat, Dog

Host Goat Clonality **Polyclonal** Concentration 0.5 mg/ml Isotype laG Calculated MW 573841

UBR4 / ZUBR1 Antibody (C-Term) - Additional Information

Gene ID 23352

Other Names

E3 ubiquitin-protein ligase UBR4, 6.3.2.-, 600 kDa retinoblastoma protein-associated factor, N-recognin-4, Retinoblastoma-associated factor of 600 kDa, RBAF600, p600, Zinc finger UBR1-type protein 1, UBR4, KIAA0462, KIAA1307, RBAF600, ZUBR1

Dilution

IHC~~1:100~500

E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

UBR4 / ZUBR1 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

UBR4 / ZUBR1 Antibody (C-Term) - Protein Information

Name UBR4 {ECO:0000303|PubMed:35032865, ECO:0000312|HGNC:HGNC:30313}

Function



E3 ubiquitin-protein ligase involved in different protein quality control pathways in the cytoplasm (PubMed:25582440, PubMed:29033132, PubMed: 34893540, PubMed:37891180, PubMed: 38030679, PubMed: 38182926, PubMed:38297121). Component of the N-end rule pathway: ubiquitinates proteins bearing specific N-terminal residues that are destabilizing according to the N-end rule, leading to their degradation (PubMed:34893540, PubMed:37891180, PubMed:38030679). Recognizes both type-1 and type-2 N-degrons, containing positively charged amino acids (Arg, Lys and His) and bulky and hydrophobic amino acids, respectively (PubMed: 38030679). Does not ubiquitinate proteins that are acetylated at the N-terminus (PubMed:<a $href="http://www.uniprot.org/citations/37891180" \ target="_blank">37891180). \ Together$ with UBR5, part of a cytoplasm protein quality control pathway that prevents protein aggregation by catalyzing assembly of heterotypic 'Lys-11'-/'Lys-48'- linked branched ubiquitin chains on aggregated proteins, leading to substrate recognition by the segregase p97/VCP and degradation by the proteasome: UBR4 probably synthesizes mixed chains containing multiple linkages, while UBR5 is likely branching multiple 'Lys-48'-linked chains of substrates initially modified (PubMed: 29033132). Together with KCMF1, part of a protein quality control pathway that catalyzes ubiquitination and degradation of proteins that have been oxidized in response to reactive oxygen species (ROS): recognizes proteins with an Arg-CysO3(H) degron at the N-terminus, and mediates assembly of heterotypic 'Lys-63'-/'Lys-27'-linked branched ubiquitin chains on oxidized proteins, leading to their degradation by autophagy (PubMed: 34893540). Catalytic component of the SIFI complex, a multiprotein complex required to inhibit the mitochondrial stress response after a specific stress event has been resolved: ubiquitinates and degrades (1) components of the HRI-mediated signaling of the integrated stress response, such as DELE1 and EIF2AK1/HRI, as well as (2) unimported mitochondrial precursors (PubMed:38297121). Within the SIFI complex, UBR4 initiates ubiquitin chain that are further elongated or branched by KCMF1 (PubMed:38297121). Mediates ubiquitination of ACLY, leading to its subsequent degradation (PubMed: 23932781). Together with clathrin, forms meshwork structures involved in membrane morphogenesis and cytoskeletal organization (PubMed:16214886).

Cellular Location

Cytoplasm. Cytoplasm, cytoskeleton. Nucleus {ECO:0000250|UniProtKB:A2AN08}. Note=Localizes to endosomes via its association with calcium-bound calmodulin (By similarity). Concentrates at the leading edge of membrane structures involved in actin motility (PubMed:16214886). {ECO:0000250|UniProtKB:A2AN08, ECO:0000269|PubMed:16214886}

UBR4 / ZUBR1 Antibody (C-Term) - Protocols

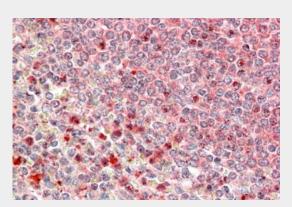
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides



- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

UBR4 / ZUBR1 Antibody (C-Term) - Images



AF3012a (5 μ g/ml) staining of paraffin embedded Human Spleen. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

UBR4 / ZUBR1 Antibody (C-Term) - References

The response of autologous T cells to a human melanoma is dominated by mutated neoantigens. Lennerz V, Fatho M, Gentilini C, Frye RA, Lifke A, Ferel D, Wölfel C, Huber C, Wölfel T. Proceedings of the National Academy of Sciences of the United States of America 2005 Nov 102 (44): 16013-8. PMID: 16247014