10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

UBR2 Antibody (Internal)
Goat Polyclonal Antibody
Catalog # ALS16594

Specification

UBR2 Antibody (Internal) - Product Information

Application	**IHC**
Primary Accession	Q8IWV8
Other Accession	23304
Reactivity	**Human, Mouse, Rat, Rabbit, Hamster, Monkey, Pig, Chicken, Bovine, Horse, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**200538**

UBR2 Antibody (Internal) - Additional Information

Gene ID 23304

Other Names
UBR2, BA49A4.1, C6orf133, DJ392M17.3, DJ242G1.1, N-recognin-2, KIAA0349, RP3-392M17.3

Target/Specificity
Human UBR2.

Reconstitution & Storage
Tris-buffered saline, pH 7.3, 0.5% BSA, 0.02% sodium azide. Store at -20°C. Minimize freezing and thawing.

Precautions
UBR2 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

UBR2 Antibody (Internal) - Protein Information

Name UBR2

Synonyms C6orf133, KIAA0349

Function
E3 ubiquitin-protein ligase which is a component of the N-end rule pathway (PubMed:15548684, PubMed:20835242, PubMed:28392261). Recognizes and binds to proteins bearing specific N-terminal residues (N-degrons) that are destabilizing according to the N-end rule, leading to their ubiquitination and subsequent degradation (PubMed:20835242, PubMed:28392261).

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:20835242, PubMed:28392261). Does not ubiquitinate proteins that are acetylated at the N-terminus (PubMed:20835242). In contrast, it strongly binds methylated N-degrons (PubMed:28392261). Plays a critical role in chromatin inactivation and chromosome-wide transcriptional silencing during meiosis via ubiquitination of histone H2A (By similarity). Binds leucine and is a negative regulator of the leucine-mTOR signaling pathway, thereby controlling cell growth (PubMed:20298436). Required for spermatogenesis, promotes, with Tex19.1, SPO11-dependent recombination foci to accumulate and drive robust homologous chromosome synapsis (By similarity). Polyubiquitinates LINE-1 retrotransposon encoded, LIRE1, which induces degradation, inhibiting LINE-1 retrotransposon mobilization (By similarity). Catalyzes ubiquitination and degradation of the N-terminal part of NLRP1 following NLRP1 activation by pathogens and other damage-associated signals: ubiquitination promotes degradation of the N-terminal part and subsequent release of the cleaved C-terminal part of NLRP1, which polymerizes and forms the NLRP1 inflammasome followed by host cell pyroptosis (By similarity). Plays a role in T-cell receptor signaling by inducing 'Lys-63'-linked ubiquitination of lymphocyte cell-specific kinase LCK (PubMed:38225265). This activity is regulated by DUSP22, which induces 'Lys-48'-linked ubiquitination of UBR2, leading to its proteasomal degradation by SCF E3 ubiquitin-protein ligase complex (PubMed:38225265).

Cellular Location
Nucleus {ECO:0000250|UniProtKB:Q6WKZ8}. Chromosome {ECO:0000250|UniProtKB:Q6WKZ8}. Note=Associated with chromatin during meiosis. {ECO:0000250|UniProtKB:Q6WKZ8}

Tissue Location
Broadly expressed, with highest levels in skeletal muscle, kidney and pancreas. Present in acinar cells of the pancreas (at protein level).

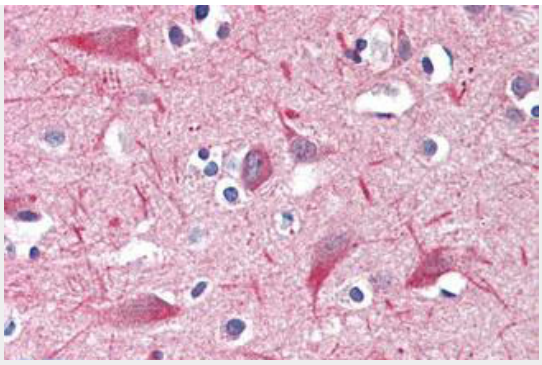
UBR2 Antibody (Internal) - Protocols

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

UBR2 Antibody (Internal) - Images

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Anti-UBR2 antibody IHC staining of human brain, cortex.

UBR2 Antibody (Internal) - Background

E3 ubiquitin-protein ligase which is a component of the N-end rule pathway. Recognizes and binds to proteins bearing specific N-terminal residues that are destabilizing according to the N-end rule, leading to their ubiquitination and subsequent degradation. Plays a critical role in chromatin inactivation and chromosome-wide transcriptional silencing during meiosis via ubiquitination of histone H2A. Binds leucine and is a negative regulator of the leucine-mTOR signaling pathway, thereby controlling cell growth.

UBR2 Antibody (Internal) - References

Kwak K.S.,et al.Cancer Res. 64:8193-8198(2004).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mungall A.J.,et al.Nature 425:805-811(2003).
Nagase T.,et al.DNA Res. 4:141-150(1997).
Yin J.,et al.Hum. Mol. Genet. 13:2421-2430(2004).