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

UBR1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20192a

Product Information

Application	WB, E
Primary Accession	Q8IWV7
Other Accession	O70481, NP_777576.1
Reactivity	Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB41861
Calculated MW	200211
Antigen Region	245-274

Additional Information

Gene ID	197131
Other Names	E3 ubiquitin-protein ligase UBR1, 632-, N-recognin-1, Ubiquitin-protein ligase E3-alpha-1, Ubiquitin-protein ligase E3-alpha-I, UBR1
Target/Specificity	This UBR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 245-274 amino acids from the N-terminal region of human UBR1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
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	UBR1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	UBR1 {ECO:0000303|PubMed:15317757, ECO:0000312|HGNC:HGNC:16808}
Function	E3 ubiquitin-protein ligase which is a component of the N-end rule pathway (PubMed:15548684, PubMed:16311597, PubMed:18162545,

PubMed:20835242, PubMed:28392261). Recognizes and binds proteins bearing specific N-terminal residues that are destabilizing according to the N-end rule, leading to their ubiquitination and subsequent degradation (PubMed:18162545, 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:18162545). Does not ubiquitinate proteins that are acetylated at the N-terminus (PubMed:20835242). In contrast, it strongly binds methylated N-degrons (PubMed:28392261). Binds leucine and is a negative regulator of the leucine-mTOR signaling pathway, thereby controlling cell growth (PubMed:20298436).

Cellular Location Cytoplasm, cytosol.

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

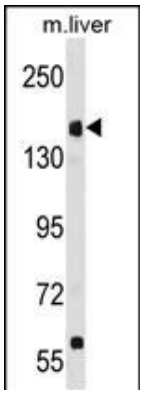
Background

The N-end rule pathway is one proteolytic pathway of the ubiquitin system. The recognition component of this pathway, encoded by this gene, binds to a destabilizing N-terminal residue of a substrate protein and participates in the formation of a substrate-linked multiubiquitin chain. This leads to the eventual degradation of the substrate protein. The protein described in this record has a RING-type zinc finger and a UBR-type zinc finger. Mutations in this gene have been associated with Johanson-Blizzard syndrome.

References

Elting, M., et al. Am. J. Med. Genet. A 146A (23), 3058-3061 (2008) :
Alkhouri, N., et al. World J. Gastroenterol. 14(44):6863-6866(2008)
Yamaguchi, Y., et al. BMC Med. Genet. 9, 22 (2008) :
Schmidt, R.L., et al. Cancer Res. 67(24):11798-11810(2007)
Wei, S., et al. Mol. Pharmacol. 72(3):725-733(2007)

Images



UBR1 Antibody (N-term) (Cat. #AP20192a) western blot analysis in mouse liver tissue lysates (35ug/lane).This demonstrates the UBR1 antibody detected the UBR1 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.