Product Name: HUWE1 Rabbit Polyclonal Antibody
Catalog #: APRab12290

Summary

Production Name	HUWE1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	HUWE1 KIAA0312 KIAA1578 UREB1 HSPC272
Alternative Names	
Gene ID	10075.0
SwissProt ID	Q7Z6Z7.Synthesized peptide derived from part region of human protein

Application

Dilution Ratio	IHC 1:50-300
Molecular Weight	481kD

Background

This gene encodes a protein containing a C-terminal HECT (E6AP type E3 ubiquitin protein ligase) domain that functions as an E3 ubiquitin ligase. The encoded protein is required for the ubiquitination and subsequent degradation of the anti-

apoptotic protein Mcl1 (myeloid cell leukemia sequence 1 (BCL2-related)). This protein also ubiquitinates the p53 tumor suppressor, core histones, and DNA polymerase beta. Mutations in this gene are associated with Turner type X-linked syndromic mental retardation. [provided by RefSeq, Aug 2013],disease:A chromosomal microduplication involving HUWE1 and HSD17B10 is the cause of mental retardation X-linked type 17 (MRX17) [MIM:300705]; also known as mental retardation X-linked type 31 (MRX31). Mental retardation is characterized by significantly sub-average general intellectual functioning associated with impairments in adaptative behavior and manifested during the developmental period. In contrast to syndromic or specific X-linked mental retardation which also present with associated physical, neurological and/or psychiatric manifestations, intellectual deficiency is the only primary symptom of non-syndromic X-linked mental retardation.,disease:Defects in HUWE1 are the cause of mental retardation syndromic X-linked Turner type (MRXST) [MIM:300706]; also known as mental retardation and macrocephaly syndrome. MRXST shows clinical variability. Associated phenotypes include macrocephaly and variable contractures.,domain:The HECT domain mediates inhibition of the transcriptional activity of p53.,function:E3 ubiquitin-protein ligase which mediates ubiquitination and subsequent proteasomal degradation of target proteins. Regulates apoptosis by catalyzing the polyubiquitination and degradation of MCL1. Also ubiquitinates the p53 tumor suppressor and core histones including H1, H2A, H2B, H3 and H4. Binds to an upstream initiator-like sequence in the preprodynorphin gene. Regulates neural differentiation and proliferation by catalyzing the polyubiquitination and degradation of MYCN. May regulate abundance of CDC6 after DNA damage by polyubiquitinating and targeting CDC6 to degradation.,pathway:Protein modification; protein ubiquitination.,PTM:Phosphorylated on tyrosine; phosphorylation is probably required for its ability to inhibit TP53 transactivation.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,sequence caution:Chimeric cDNA, contains the C-terminal part of ATP5I.,similarity:Belongs to the TOM1/PTR1 family.,similarity:Contains 1 HECT (E6AP-type E3 ubiquitin-protein ligase) domain.,similarity:Contains 1 UBA domain.,similarity:Contains 1 UIM (ubiquitin-interacting motif) repeat.,similarity:Contains 1 WWE domain.,subcellular location:Mainly expressed in the cytoplasm of most tissues, except in the nucleus of spermatogonia, primary spermatocytes and neuronal cells (By similarity). Predominantly cytosolic or perinuclear in some colorectal carcinoma cells.,subunit:Interacts with isoform p14ARF of CDKN2A which strongly inhibits HUWE1 ubiquitin ligase activity. Interacts with MYCN and CDC6.,tissue specificity:Weakly expressed in heart, brain and placenta but not in other tissues. Expressed in a number of cell lines, predominantly in those from colorectal carcinomas.,

Research Area

Ubiquitin mediated proteolysis;

Image Data

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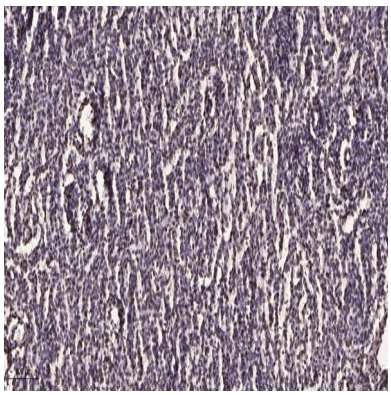

Immunohistochemical analysis of paraffin-embedded human brain tumor. 1, Antibody was diluted at 1:200（4° overnight）. 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200（room temperature, 45min）.

Note

For research use only.