

Product datasheet

Anti-HUWE1/Mule antibody ab65153

4 Images

Overview

Product name	Anti-HUWE1/Mule antibody
Description	Rabbit polyclonal to HUWE1/Mule
Host species	Rabbit
Specificity	This antibody reacts with HUWE1/Mule.
Tested applications	Suitable for: ICC/IF, WB, IHC-P
Species reactivity	Reacts with: Rat, Human
Immunogen	Synthetic peptide corresponding to HUWE1/Mule (C terminal). Peptide corresponding to 19 amino acids near the C-terminus of human HUWE1. Database link: Q7Z6Z7
Positive control	Brain, cortex; heart.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituent: PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab65153 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 1 µg/ml.
WB		Use a concentration of 1 - 2 µg/ml. Predicted molecular weight: 481 kDa.
IHC-P		Use a concentration of 5 µg/ml.

Target

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. Mediates monoubiquitination of DNA polymerase beta (POLB) at 'Lys-41', 'Lys-61' and 'Lys-81', thereby playing a role in base-excision repair. Also ubiquitinates the p53/TP53 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.

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.

Pathway

Protein modification; protein ubiquitination.

Involvement in 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. 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 adaptive 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.

Sequence similarities

Belongs to the TOM1/PTR1 family.
Contains 1 HECT (E6AP-type E3 ubiquitin-protein ligase) domain.
Contains 1 UBA domain.
Contains 1 UIM (ubiquitin-interacting motif) repeat.
Contains 1 WWE domain.

Domain

The HECT domain mediates inhibition of the transcriptional activity of p53.

Post-translational modifications

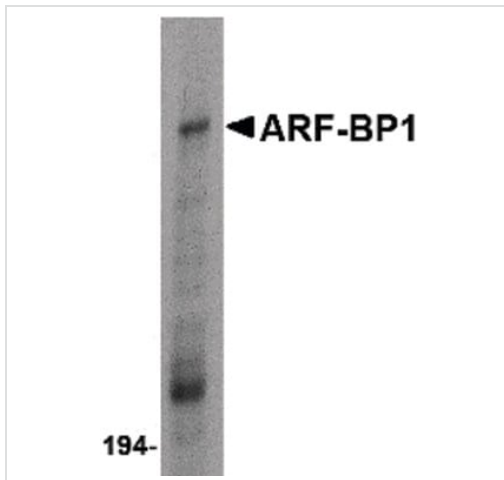
Phosphorylated on tyrosine; phosphorylation is probably required for its ability to inhibit TP53 transactivation.
Phosphorylated upon DNA damage, probably by ATM or ATR.

Cellular localization

Cytoplasm. Nucleus. Mainly expressed in the cytoplasm of most tissues, except in the nucleus of

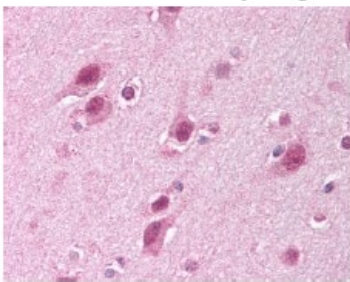
spermatogonia, primary spermatocytes and neuronal cells (By similarity). Predominantly cytosolic or perinuclear in some colorectal carcinoma cells.

Images



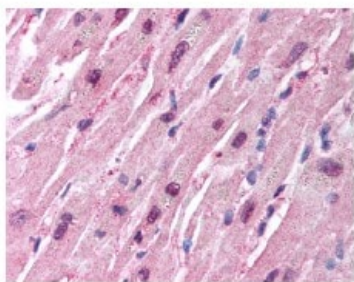
Western blot analysis using ab65153 in Daudi cell lysate at 1 ug/ml

Western blot - Anti-HUWE1/Mule antibody
(ab65153)



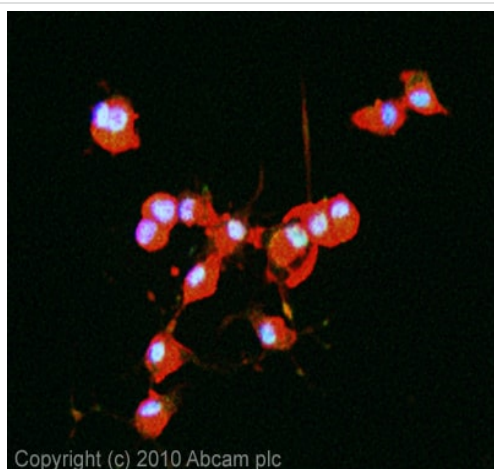
ab65153 at 5µg/ml staining HUWE1/Mule in human Brain, cortex tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HUWE1/Mule antibody
(ab65153)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HUWE1/Mule antibody (ab65153)

Immunohistochemistry analysis of paraffin embedded formalin fixed human heart tissue using 5 µg/ml ab65153.



Immunocytochemistry/ Immunofluorescence - Anti-HUWE1/Mule antibody (ab65153)

ICC/IF image of ab65153 stained PC12 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab65153, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

-
- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors