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DDA Antibody

Catalog # ASC11372

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9BW61
Other Accession	NP_003253, 13129016
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	11835
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	DDA1 antibody can be used for detection of DDA1 by Western blot at 1 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	79016
Other Names	DET1- and DDB1-associated protein 1, Placenta cross-immune reaction antigen 1, PCIA-1, DDA1, C19orf58, PCIA1
Target/Specificity	DDA1;
Reconstitution & Storage	DDA antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	DDA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DDA1 {ECO:0000303|PubMed:17452440, ECO:0000312|HGNC:HGNC:28360}
Function	Functions as a component of numerous distinct DCX (DDB1-CUL4- X-box) E3 ubiquitin-protein ligase complexes which mediate the ubiquitination and subsequent proteasomal degradation of target proteins (PubMed:17452440, PubMed:28302793, PubMed:28437394, PubMed:31686031, PubMed:31819272). In the DCX complexes, acts as a scaffolding subunit required to stabilize the complex (PubMed:31686031, PubMed:31819272).

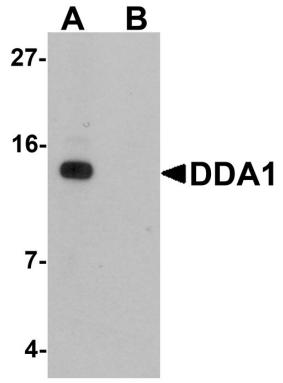
Background

DDA Antibody: DDA1 (DET1 and DDB1 associated 1), along with DET1 and DDB1 and a member of the UBE2E group of canonical ubiquitin-conjugating enzymes, comprise DDD-E2 complexes, which interact with multiple ubiquitin E3 ligases. One of these E3 ligases is Cul4-containing E3 ligase complex CRL4. Cells depleted of DDA1 spontaneously accumulate double-stranded DNA breaks in a similar fashion as Cul4A-, Cul4B-, or WDR23-depleted cells, suggesting that DDA1 interacts with the CRL4 complex and may be involved in the ubiquitination and subsequent proteasomal degradation of target proteins.

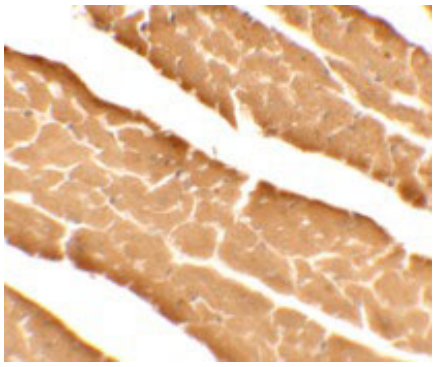
References

Pick E, Lau O, Tsuge T, et al. Mammalian DET1 regulates Cul4A activity and forms stable complexes with E2 ubiquitin-conjugating enzymes. Mol. Cell. Biol. 2007; 27:4708-19.
Olma MH, Roy M, Le Bihan T, et al. An interaction network of the mammalian COP9 signalsome identifies Dda1 as a core subunit of multiple Cul4-based E3 ligases. J. Cell Sci. 2009; 122:1035-44

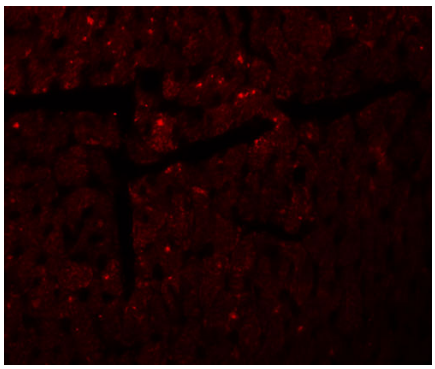
Images



Western blot analysis of DDA1 in mouse heart tissue lysate with DDA1 antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide



Immunohistochemistry of DDA1 in mouse heart tissue with DDA1 antibody at 5 µg/mL.



Immunofluorescence of DDA1 in mouse heart tissue with DDA1 antibody at 20 µg/mL.

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