

**DDA Antibody**  
Catalog # ASC11372**Specification****DDA Antibody - Product Information**

Application	WB, IHC, IF
Primary Accession	<a href="#">O9BW61</a>
Other Accession	<a href="#">NP_003253</a> , <a href="#">13129016</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	DDA1 antibody can be used for detection of DDA1 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.

**DDA Antibody - Additional Information**

Gene ID	79016
Target/Specificity	DDA1;

**Reconstitution & Storage**

DDA antibody can be stored at 4°C for three months and -20°C, 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.

**DDA Antibody - Protein Information**

**Name** DDA1 {ECO:0000303|PubMed:17452440, ECO:0000312|HGNC:HGNC:28360}

**Function**

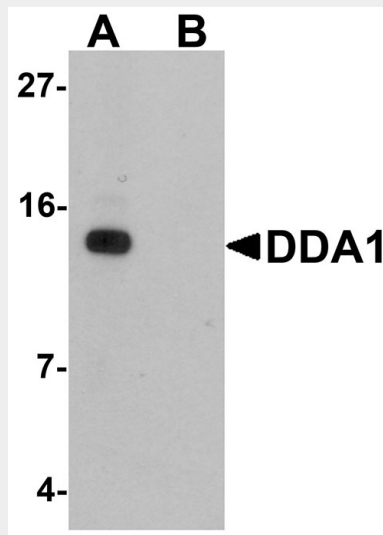
Functions as a component of numerous distinct DCX (DDB1-CUL4- X-box) E3 ubiquitin-protein ligase complexes which mediate the ubiquitination and subsequent proteasomal degradation of target proteins (PubMed: [17452440](http://www.uniprot.org/citations/17452440) target="\_blank">17452440</a>, PubMed: [28302793](http://www.uniprot.org/citations/28302793) target="\_blank">28302793</a>, PubMed: [28437394](http://www.uniprot.org/citations/28437394) target="\_blank">28437394</a>, PubMed: [31686031](http://www.uniprot.org/citations/31686031) target="\_blank">31686031</a>, PubMed: [31819272](http://www.uniprot.org/citations/31819272) target="\_blank">31819272</a>). In the DCX complexes, acts as a scaffolding subunit required to stabilize the complex (PubMed: [31686031](http://www.uniprot.org/citations/31686031) target="\_blank">31686031</a>, PubMed: [31819272](http://www.uniprot.org/citations/31819272) target="\_blank">31819272</a>).

## DDA Antibody - Protocols

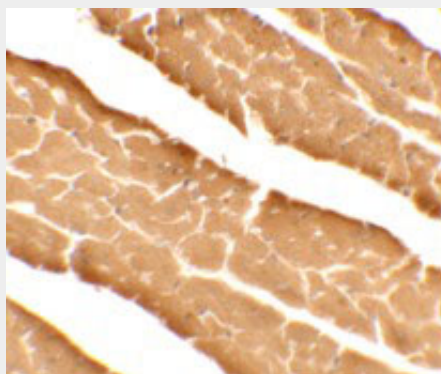
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## DDA Antibody - Images



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



Immunohistochemistry of DDA1 in mouse heart tissue with DDA1 antibody at 5  $\mu$ g/mL.



Immunofluorescence of DDA1 in mouse heart tissue with DDA1 antibody at 20  $\mu\text{g}/\text{mL}$ .

### **DDA Antibody - 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.

### **DDA Antibody - 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