

**Dact2 Antibody**  
**Catalog # ASC10789****Specification**

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**Dact2 Antibody - Product Information**

Application	WB, IHC, IF
Primary Accession	<a href="#">Q5SW24</a>
Other Accession	<a href="#">NP_999627</a> , <a href="#">163965434</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	Dact2 antibody can be used for detection of Dact2 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.

**Dact2 Antibody - Additional Information**

Gene ID	168002
Target/Specificity	
DACT2;	

**Reconstitution & Storage**

Dact2 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**

Dact2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Dact2 Antibody - Protein Information**

**Name** DACT2

**Synonyms** C6orf116

**Function**

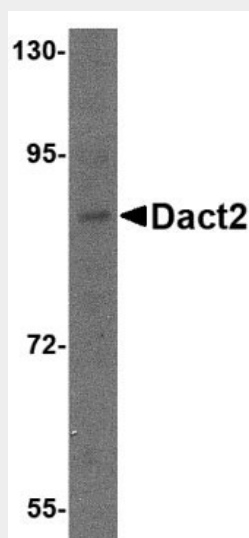
Involved in regulation of intracellular signaling pathways during development. Negatively regulates the Nodal signaling pathway, possibly by promoting the lysosomal degradation of Nodal receptors, such as TGFBR1. May be involved in control of the morphogenetic behavior of kidney ureteric bud cells by keeping cells epithelial and restraining their mesenchymal character. May play an inhibitory role in the re-epithelialization of skin wounds by attenuating TGF-beta signaling (By similarity).

## Dact2 Antibody - Protocols

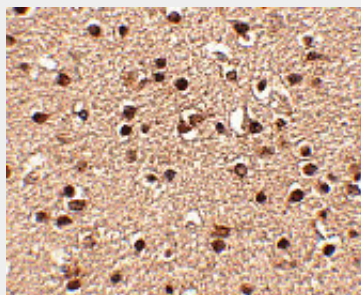
Provided below are standard protocols that you may find useful for product applications.

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

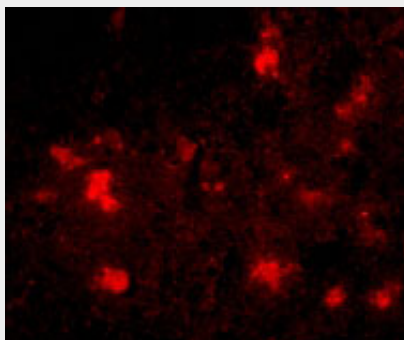
## Dact2 Antibody - Images



Western blot analysis of Dact2 in SK-N-SH cell lysate with Dact2 antibody at 1 µg/mL.



Immunohistochemistry of Dact2 in human brain tissue with Dact2 antibody at 2.5 µg/mL.



Immunofluorescence of Dact2 in Human Brain cells with Dact2 antibody at 20 µg/mL.

### **Dact2 Antibody - Background**

**Dact2 Antibody:** The Wnt signaling cascade is a conserved process in multicellular animals that plays important roles during development and can contribute to cancer and other diseases. Many members of this pathway are also expressed in the postnatal tissues such as brain. One such protein is Dact2, a member of the Dact protein family that was initially identified through binding to Disheveled (Dvl), a cytoplasmic protein essential to Wnt signaling. Dact2 is most prominent during the development of the thymus kidneys, and salivary gland. Dact2 is thought to play a role distinct from that of Dact1 with Dact2 having a greater impact on a beta-catenin-independent process termed planar cell polarity/convergent-extension signaling. Furthermore, Dact2 but not Dact1 can inhibit Nodal signaling by promoting the endocytic degradation of TGF-beta receptors. At least two isoforms of Dact2 are known to exist.

### **Dact2 Antibody - References**

Shimigori T, VanSant J, Paik E, et al. Members of the Wnt, Fz, and Frp gene families expressed in postnatal mouse cerebral cortex. *J. Comp. Neurol.*2004; 473:496-510.  
Cheyette BNR, Waxman JS, Miller JR, et al. Dapper, a Dishevelled-associated antagonist of beta-catenin and JNK signaling, is required for notochord formation. *Dev. Cell*2002; 2:449-61.  
Katoh M and Katoh M. Identification and characterization of human DAPPER1 and DAPPER2 genes in silico. *Int. J. Oncol.*22:907-13.  
Waxman JS, Hocking AM, Stoick CL, et al. Zebrafish DAPPER1 and DAPPER2 play distinct roles in Wnt-mediated developmental processes. *Development*2004; 131:5909-21.