

Dact2 Antibody

Catalog # ASC10789

Specification

Dact2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype **Application Notes**

WB, IHC, IF **Q5SW24** NP 999627, 163965434 Human, Mouse, Rat

Rabbit Polyclonal laG

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).

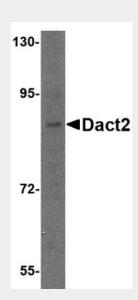


Dact2 Antibody - Protocols

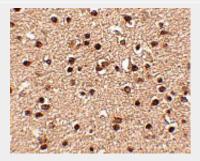
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

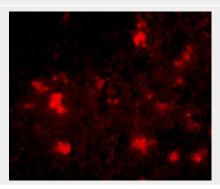
Dact2 Antibody - Images



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 (DvI), 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. Cell2002; 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. Development2004; 131:5909-21.