

Dact2 Antibody

Catalog # ASC10789

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q5SW24
Other Accession	NP_999627 , 163965434
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	82700
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Dact2 antibody can be used for detection of Dact2 by Western blot at 1 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	168002
Other Names	Dapper homolog 2, Dapper antagonist of catenin 2, DACT2, C6orf116
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.

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).

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.

References

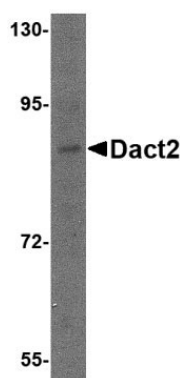
Shimigori T, VanSant J, Paik E, et al. Members of the Wnt, Fz, and Frp gene families expressed in postnatal mouse cerebral cortex. *J. Comp. Neurol.*2004; 473:496-510.

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.

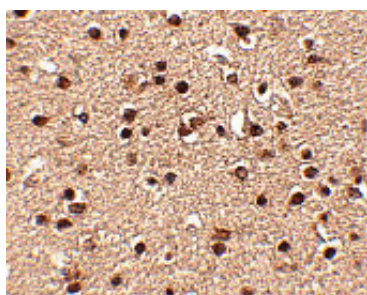
Katoh M and Katoh M. Identification and characterization of human DAPPER1 and DAPPER2 genes in silico. *Int. J. Oncol.*22:907-13.

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.

Images

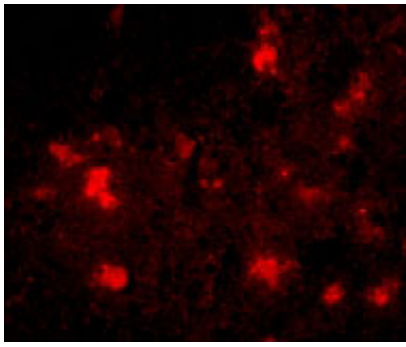


Western blot analysis of Dact2 in SK-N-SH cell lysate with Dact2 antibody at 1 µg/mL.



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.



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