

Dact3 Antibody

Catalog # ASC10793

Product Information

Application	WB, E
Primary Accession	Q96B18
Other Accession	Q96B18 , 119368655
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	64949
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Dact3 antibody can be used for detection of Dact3 by Western blot at 1 μ g/mL.

Additional Information

Gene ID	147906
Other Names	Dapper homolog 3, Antagonist of beta-catenin Dapper homolog 3, Arginine-rich region 1 protein, Dapper antagonist of catenin 3, DACT3, RRR1
Target/Specificity	DACT3;
Reconstitution & Storage	Dact3 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	Dact3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DACT3
Synonyms	RRR1
Function	May be involved in regulation of intracellular signaling pathways during development. Specifically thought to play a role in canonical and/or non-canonical Wnt signaling pathways through interaction with DSH (Dishevelled) family proteins.

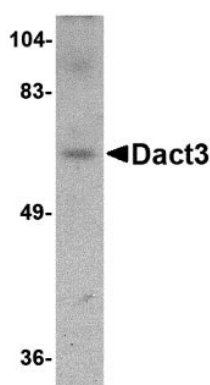
Background

Dact3 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 Dact3, a member of the Dact protein family that was initially identified through binding to Disheveled (Dvl), a cytoplasmic protein essential to Wnt signaling. Dact3 is expressed in the ventral region of maturing somites, limb bud and branchial arch mesenchyme, embryonic CNS, and the adult brain. Recent evidence shows that Dact3 acts as a negative regulator Wnt/beta-catenin signaling that is repressed at the transcriptional level in colorectal cancer and this repression is associated with bivalent histone modifications. This repression can be reversed by pharmacological agents that targets both histone methylation and deacetylation, suggesting that Dact3 may be a potential target for therapeutic treatment of this cancer. At least three isoforms of Dact3 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.
Fisher DA, Kivimae S, Hoshino J, et al. Three Dact gene family members are expressed during embryonic development and in the adult brains of mice. *Dev. Dyn.*2006; 235:2620-30.

Images



Western blot analysis of Dact3 in rat brain tissue lysate with Dact3 antibody at 1 µg/mL.

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