10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DACT1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP5921a

Specification

DACT1 Antibody (N-term) - Product Information

Application	**FC, WB, IHC-P,E**
Primary Accession	Q9NYF0
Other Accession	NP_057735.2
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**90174**
Antigen Region	**13-41**

DACT1 Antibody (N-term) - Additional Information

Gene ID 51339

Other Names
Dapper homolog 1, hDPR1, Dapper antagonist of catenin 1, Hepatocellular carcinoma novel gene 3 protein, DACT1, DPR1, HNG3

Target/Specificity
This DACT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 13-41 amino acids from the N-terminal region of human DACT1.

Dilution
FC~~1:10~50
WB~~1:1000
IHC-P~~1:50~100
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
DACT1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

DACT1 Antibody (N-term) - Protein Information

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Name DACT1

Synonyms DPR1, HNG3

Function 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. The activation/inhibition of Wnt signaling may depend on the phosphorylation status. Proposed to regulate the degradation of CTNNB1/beta-catenin, thereby modulating the transcriptional activation of target genes of the Wnt signaling pathway. Its function in stabilizing CTNNB1 may involve inhibition of GSK3B activity. Promotes the membrane localization of CTNNB1. The cytoplasmic form can induce DVL2 degradation via a lysosome-dependent mechanism; the function is inhibited by PKA-induced binding to 14-3-3 proteins, such as YWHAB. Seems to be involved in morphogenesis at the primitive streak by regulating VANGL2 and DVL2; the function seems to be independent of canonical Wnt signaling and rather involves the non- canonical Wnt/planar cell polarity (PCP) pathway (By similarity). The nuclear form may prevent the formation of LEF1:CTNNB1 complex and recruit HDAC1 to LEF1 at target gene promoters to repress transcription thus antagonizing Wnt signaling. May be involved in positive regulation of fat cell differentiation. During neuronal differentiation may be involved in excitatory synapse organization, and dendrite formation and establishment of spines.

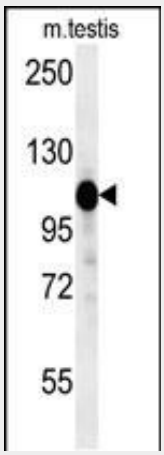
Cellular Location
Cytoplasm. Nucleus. Synapse. Note=Shuttles between the nucleus and the cytoplasm. Seems to be nuclear in the absence of Wnt signaling and to translocate to the cytoplasm in its presence

DACT1 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DACT1 Antibody (N-term) - Images



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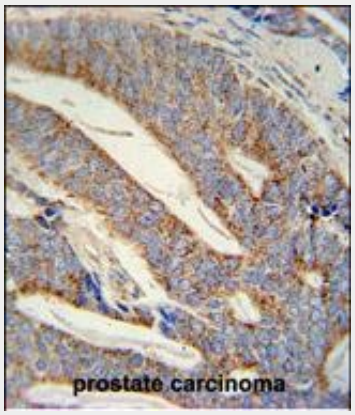
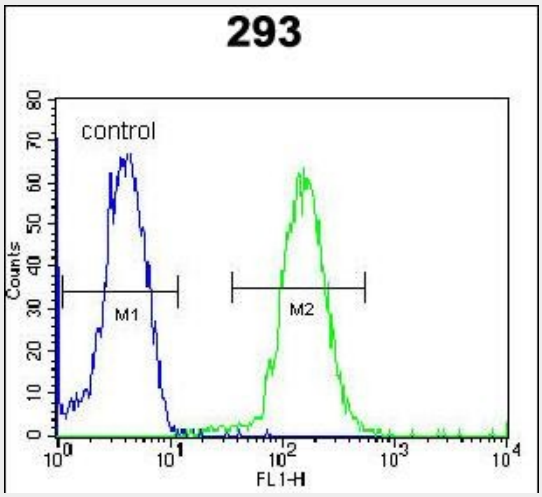
DACT1 Antibody (N-term) (Cat. #AP5921a) western blot analysis in mouse testis tissue lysates (15ug/lane).This demonstrates the DACT1 antibody detected DACT1 protein (arrow).



DACT1 antibody (N-term) (Cat. #AP5921a) immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the DACT1 antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



DACT1 Antibody (N-term) (Cat. #AP5921a) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.