

#### **DKK1 Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5504

## **Specification**

## **DKK1 Antibody - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Isotype

WB, FC, IHC-P,E
094907
Human, Mouse
Rabbit
Polyclonal
H=29;M=29 KDa
Rabbit IgG
HUMAN

## **DKK1 Antibody - Additional Information**

### **Gene ID 22943**

**Antigen Source** 

## **Antigen Region**

Recombinant protein of full sequence

## **Other Names**

Dickkopf-related protein 1, Dickkopf-1, Dkk-1, hDkk-1, SK, DKK1

### **Dilution**

WB~~1:2000 FC~~1:25 IHC-P~~1:25

### **Target/Specificity**

This DKK1 antibody is generated from a rabbit immunized with a recombinant protein of human DKK1.

### 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**

DKK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **DKK1 Antibody - Protein Information**

### Name DKK1

### **Function**

Antagonizes canonical Wnt signaling by inhibiting LRP5/6 interaction with Wnt and by forming a ternary complex with the transmembrane protein KREMEN that promotes internalization of LRP5/6





(PubMed:<a href="http://www.uniprot.org/citations/22000856" target="\_blank">22000856</a>). DKKs play an important role in vertebrate development, where they locally inhibit Wnt regulated processes such as antero-posterior axial patterning, limb development, somitogenesis and eye formation. In the adult, Dkks are implicated in bone formation and bone disease, cancer and Alzheimer disease (PubMed:<a href="http://www.uniprot.org/citations/17143291" target="\_blank">17143291</a>). Inhibits the pro-apoptotic function of KREMEN1 in a Wnt-independent manner, and has anti-apoptotic activity (By similarity).

Cellular Location Secreted.

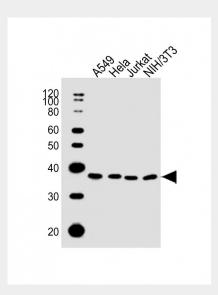
Tissue Location Placenta.

## **DKK1 Antibody - Protocols**

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

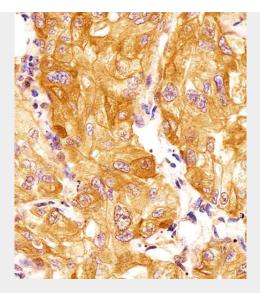
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## **DKK1 Antibody - Images**

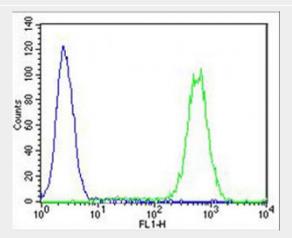


All lanes: Anti-DKK1 Antibody at 1:2000 dilution Lane 1: A549 whole cell lysates Lane 2: Hela whole cell lysates Lane 3: Jurkat whole cell lysates Lane 4: NIH/3T3 whole cell lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 29 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





AW5504 staining DKK1 in Human lung adenocarcinoma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



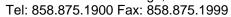
Overlay histogram showing U-2 OS cells stained with AW5504 (green line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AW5504, 1:25 dilution) for 60 min at 37 $^{\circ}$ C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) (1583138) at 1/400 dilution for 40 min at 37 $^{\circ}$ C. Isotype control antibody (blue line) was rabbit IgG1 (1 $\mu$ g/1x10 $^{\circ}$ 6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

## **DKK1 Antibody - Background**

Antagonizes canonical Wnt signaling by inhibiting LRP5/6 interaction with Wnt and by forming a ternary complex with the transmembrane protein KREMEN that promotes internalization of LRP5/6. DKKs play an important role in vertebrate development, where they locally inhibit Wnt regulated processes such as antero- posterior axial patterning, limb development, somitogenesis and eye formation. In the adult, Dkks are implicated in bone formation and bone disease, cancer and Alzheimer disease.

### **DKK1 Antibody - References**







Fedi P., et al.J. Biol. Chem. 274:19465-19472(1999). Krupnik V.E., et al. Gene 238:301-313(1999). Tate G., et al. Submitted (NOV-1998) to the EMBL/GenBank/DDBJ databases. Roessler E., et al. Cytogenet. Cell Genet. 89:220-224(2000). Clark H.F., et al. Genome Res. 13:2265-2270(2003).

# **DKK1 Antibody - Citations**

• YAP1 negatively regulates chondrocyte differentiation partly by activating the β-catenin signaling pathway.