

DKK1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21147a

Specification

DKK1 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region

IHC-P-Leica, IF, WB,E <u>094907</u> Human, Mouse, Rat Rabbit polyclonal Rabbit IgG 28672 1-266

DKK1 Antibody - Additional Information

Gene ID 22943

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

Target/Specificity

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

Dilution IHC-P-Leica~~1:500 IF~~1:25 WB~~1:2000 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 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:22000856). 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:<u>17143291</u>). Inhibits the pro-apoptotic function of KREMEN1 in a Wnt-independent manner, and has anti-apoptotic activity (By similarity).

Cellular Location Secreted.

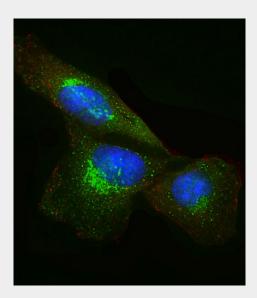
Tissue Location Placenta.

DKK1 Antibody - Protocols

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

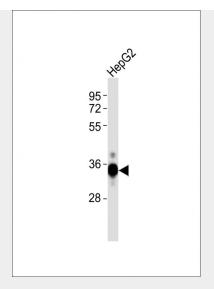
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

DKK1 Antibody - Images

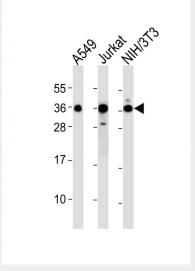


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized U-251 MG cells labeling DKK1 with AP21147a at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Rabbit IgG secondary antibody at 1/200 dilution (green). Immunofluorescence image showing Cytoplasm and Weak Nucleus staining on U-251 MG cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin(red). The nuclear counter stain is DAPI (blue).



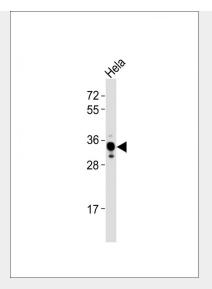


Anti-DKK1 Antibody at 1:1000 dilution + HepG2 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 29 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

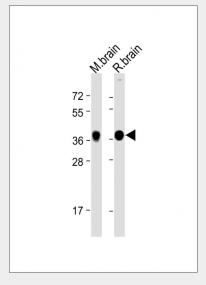


All lanes : Anti-DKK1 Antibody at 1:2000 dilution Lane 1: A549 whole cell lysates Lane 2: Jurkat whole cell lysates Lane 3: NIH/3T3 whole cell lysates Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 29 kDa Blocking/Dilution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



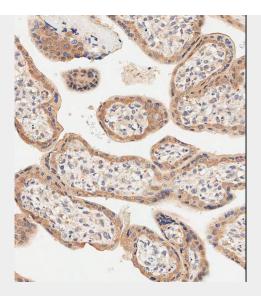


Anti-DKK1 Antibody at 1:4000 dilution + Hela whole cell lysates Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 29 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

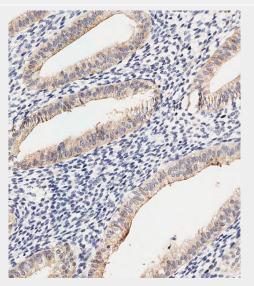


All lanes : Anti-DKK1 Antibody at 1:2000 dilution Lane 1: Mouse brain lysate Lane 2: Rat brain lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 29 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Immunohistochemical analysis of paraffin-embedded Human placenta tissue using AP21147a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded Human uterus tissue using AP21147a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

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).