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

DKK1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21147a

Product Information

Application	IHC-P-Leica, IF, WB, E
Primary Accession	O94907
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB52126
Calculated MW	28672
Antigen Region	1-266

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~~1:100 IF~~1:25 WB~~1:4000 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.

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:17143291). 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.

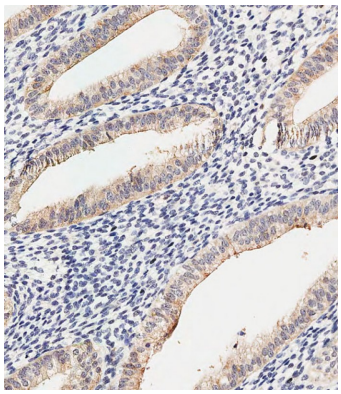
Background

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.

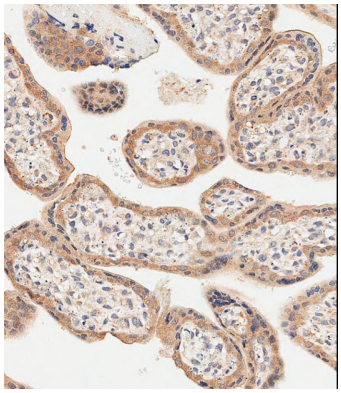
References

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).

Images

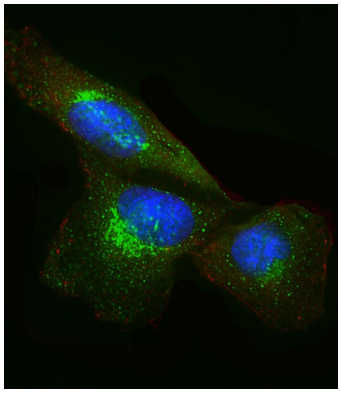


Immunohistochemical analysis of paraffin-embedded Human uterus tissue using AP21147a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1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

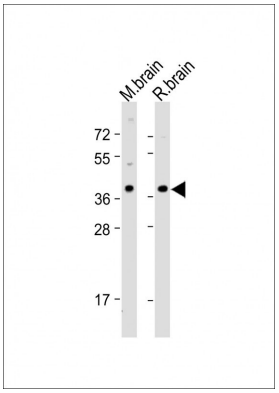


Immunohistochemical analysis of paraffin-embedded Human placenta tissue using AP21147a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for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

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).



All lanes : Anti-DKK1 Antibody at 1:1000 dilution Lane 1: Mouse brain lysate Lane 2: Rat brain lysate 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.

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