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

DKK3 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1523a

Specification

DKK3 Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q9UBP4
Other Accession	NP_037385
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**15-45**

DKK3 Antibody (N-term) - Additional Information

Gene ID 27122

Other Names
Dickkopf-related protein 3, Dickkopf-3, Dkk-3, hDkk-3, DKK3, REIC

Target/Specificity
This DKK3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 15-45 amino acids from the N-terminal region of human DKK3.

Dilution
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
DKK3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

DKK3 Antibody (N-term) - Protein Information

Name DKK3

Synonyms REIC

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. 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 (By similarity).

Cellular Location
Secreted.

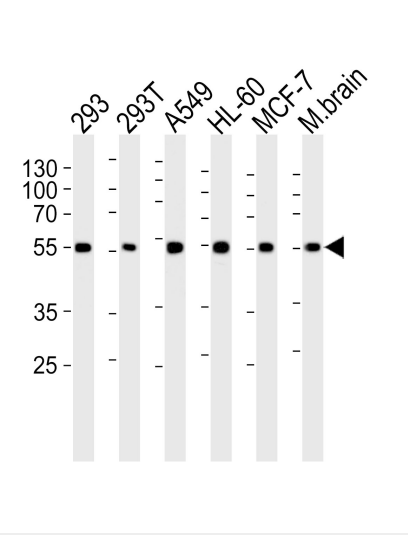
Tissue Location
Highest expression in heart, brain, and spinal cord. {ECO:0000269|PubMed:10570958, ECO:0000269|Ref.4}

DKK3 Antibody (N-term) - Protocols

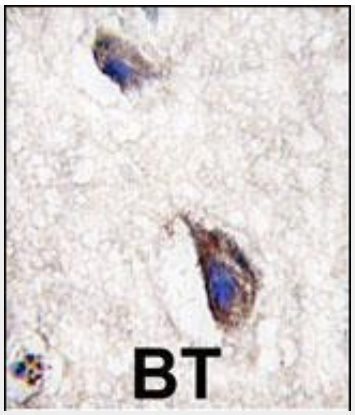
Provided below are standard protocols that you may find useful for product applications.

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

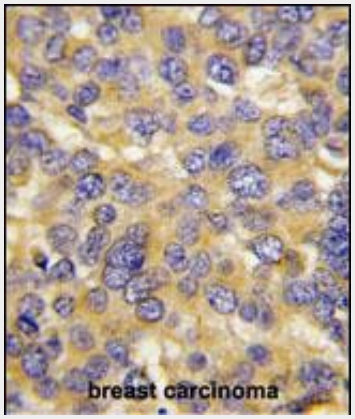
DKK3 Antibody (N-term) - Images



Western blot analysis of lysates from 293, 293T, A549, HL-60, MCF-7 cell line and mouse brain tissue lysate (from left to right), using DKK3 Antibody (A30)(Cat. # AP1523a). AP1523a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



Formalin-fixed and paraffin-embedded human brain tissue reacted with DKK3 antibody (N-term) (Cat.#AP1523a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with DKK3 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

DKK3 Antibody (N-term) - Background

DKK3, like DKK1, DKK2, and DKK4, possesses an N-terminal signal peptide and 2 conserved cysteine-rich domains, which are separated by a linker region and contain 10 cysteine residues each. The second cysteine region has a putative lipid-binding function that may facilitate WNT/DKK interactions at the plasma membrane. The linker region contains 50 to 55 amino acids in DKK1, DKK2, and DKK4, whereas in DKK3 it contains only 12 amino acids. All DKKs have several potential sites for cleavage by furin-type proteases. Northern blot analysis revealed wide expression of the DKK3 transcript, with highest expression in heart, brain, and spinal cord. In situ hybridization reveals highest expression in mouse brain, eye, and heart.

DKK3 Antibody (N-term) - References

Clark, H.F., et al., Genome Res. 13(10):2265-2270 (2003).
Tsuji, T., et al., Biochem. Biophys. Res. Commun. 268(1):20-24 (2000).
Krupnik, V.E., et al., Gene 238(2):301-313 (1999).
Kobayashi, K., et al., Gene 282 (1-2), 151-158 (2002).

DKK3 Antibody (N-term) - Citations

- Dickkopf-3 links HSF1 and YAP/TAZ signalling to control aggressive behaviours in cancer-associated fibroblasts.

- Down-regulated REIC expression in lung carcinogenesis: a molecular target for gene therapy.
- Aberrant DKK3 expression in the oral leukoplakia and oral submucous fibrosis: a comparative immunohistochemical study.
- Wnt signalling in human breast cancer: expression of the putative Wnt inhibitor Dickkopf-3 (DKK3) is frequently suppressed by promoter hypermethylation in mammary tumours.
- Expression of Dickkopf genes is strongly reduced in malignant melanoma.