

# DKK3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5375

#### **Product Information**

Application WB
Primary Accession Q9UBP4
Other Accession NP\_037385
Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Calculated MW 38390
Isotype Rabbit IgG
Antigen Source HUMAN

## **Additional Information**

**Gene ID** 27122

Antigen Region 15-45

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

**Dilution** WB~~1:1000

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.

**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.

#### **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}

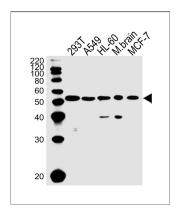
# **Background**

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.

## 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).

# **Images**



All lanes: Anti-DKK3 Antibody A30 at 1:1000 dilution Lane 1: 293T whole cell lysates Lane 2: A549 whole cell lysates Lane 3: HL-60 whole cell lysates Lane 4: mouse brain lysates Lane 5: MCF-7 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: 38 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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