

## **DKK3 Antibody (N-term) Blocking Peptide**

Synthetic peptide Catalog # BP1523a

### **Specification**

## **DKK3 Antibody (N-term) Blocking Peptide - Product Information**

Primary Accession Q9UBP4
Other Accession NP 037385

# DKK3 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 27122

#### **Other Names**

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

## Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP1523a>AP1523a</a> was selected from the N-term region of human DKK3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### DKK3 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - Protocols**

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

• Blocking Peptides

DKK3 Antibody (N-term) Blocking Peptide - Images

## DKK3 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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) Blocking Peptide - Citations**

• <u>Down-regulated REIC expression in lung carcinogenesis: a molecular target for gene therapy.</u>