

DKK4 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP1524a**Specification**

DKK4 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession
Other Accession[O9UBT3](#)
[NP_055235](#)**DKK4 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 27121**Other Names**

Dickkopf-related protein 4, Dickkopf-4, Dkk-4, hDkk-4, Dickkopf-related protein 4 short form, DKK4

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1524a was selected from the N-term region of human DKK4. 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.

DKK4 Antibody (N-term) Blocking Peptide - Protein Information**Name** DKK4**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

Expressed in cerebellum, T-cells, esophagus and lung

DKK4 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

DKK4 Antibody (N-term) Blocking Peptide - Images**DKK4 Antibody (N-term) Blocking Peptide - Background**

DKK4, like DKK1, DKK2, and DKK3, 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 DKCs have several potential sites for cleavage by furin-type proteases. Northern blot analysis detected no expression of DKK4, but RT-PCR analysis detected DKK4 expression in cerebellum, T-cell, esophagus, and lung cDNA libraries. DKK4 blocks *Xenopus* Wnt8, Wnt3a, and Wnt2b, but not Dsh or Fz8, induction of a secondary axis in frog embryos, indicating that DKCs antagonize WNT function upstream of WNT receptors.

DKK4 Antibody (N-term) Blocking Peptide - References

Krupnik, V.E., et al., *Gene* 238(2):301-313 (1999). Yoshida, S., et al., *Cytogenet. Cell Genet.* 94 (1-2), 88-89 (2001).