

Recombinant Human DKK4, His-tagged

Cat. No. DKK4-78H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Dickkopf-Related Protein 4/DKK4 is produced by our mammalian expression system in human cells. The target protein is expressed with sequence (Leu19-Leu224) of Human DKK4 fused with a polyhistidine tag at the C-terminus.
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Species	Human
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Source	HEK293
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ProteinLength	19-224 a.a.
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Description	Dickkopf-Related Protein 4 (DKK4) is a member of the DKK protein family that includes DKK1, DKK2, DKK3, and DKK4. DKK1 and DKK4 are Wnt antagonists. DKK1 and DKK4 antagonize Wnt/β-Catenin signaling by direct high affinity binding to the Wnt coreceptor LRP5/6 and inhibiting interaction of LRP5/6 with the Wnt Frizzled complex. DKK1 and DKK4 also bind the transmembrane proteins Kremen1 (Krm1) and Kremen 2 (Krm2) with high affinity. Krm2 has been shown to form a ternary complex with DKK1 or DKK4 and LRP5/LRP6 to trigger internalization of the complex and removal of LRP6 from the cell surface. Thus, DKK1/DKK4 and Kremens function synergistically to antagonize LRP5/LRP6 mediated Wnt activity. 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.
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Form	Lyophilized from a 0.2 µM filtered solution of 10mM Tris-Citrate, 150mM NaCl, pH 8.0
AA Sequence	LVLDFNNIRSSADLHGARKGSQCLSDTDCNTRKFCLQPRDEKPFCA ₂ TCRGLRRRCQ RDAMCCPGT LCVNDVCTTMEDATPILERQLDEQDGT ₂ HAEGTTGHPVQENQPKRKP SIKKSQGRKGQEGESCLRT FDCGPGLCCARHFWTKICKPVLL ₂ EGQVCSRRGHKDT AQAPEIFQRCD ₂ CGPGLLCRSQ ₂ LTSNRQHA RLRVCQKIEKLVDH ₂ HHHHH
Endotoxin	Less than 0.1 ng/µg (1 IEU/µg).
Purity	Greater than 95% as determined by SEC-HPLC and reducing SDS-PAGE.
Storage	Lyophilized protein should be stored at Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in 1X PBS. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

GENE INFORMATION

Gene Name	DKK4 dickkopf homolog 4 (Xenopus laevis) [Homo sapiens]
Official Symbol	DKK4
Synonyms	DKK4; dickkopf homolog 4 (Xenopus laevis); dickkopf (Xenopus laevis) homolog 4; dickkopf-related protein 4; hDkk-4; dickkopf-4; DKK-4; MGC129562; MGC129563;
Gene ID	27121
mRNA Refseq	NM_014420

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Protein Refseq	NP_055235
MIM	605417
UniProt ID	Q9UBT3
Chromosome Location	8p11.2-p11.1
Pathway	Regulation of Wnt-mediated beta catenin signaling and target gene transcription, organism-specific biosystem; Wnt signaling pathway, organism-specific biosystem; Wnt signaling pathway, conserved biosystem;
Function	molecular_function;

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