

Active Recombinant Mouse Dickkopf Homolog 1 (Xenopus laevis), His-tagged

Cat. No. Dkk1-395M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant mouse Dkk1 protein was expressed in Murine myeloma cell line, NS0-derived, with a C-terminal 10-His tag. Ser30-His272.
Species	Mouse
Source	Mammalian Cells
Protein Length	30-272 a.a.
Description	Dkk1 is the founding member of the Dickkopf family of proteins that includes Dkk-1, -2, -3, -4, and a related protein, Soggy. Dkk proteins are secreted proteins that contain two conserved cysteine-rich domains separated by a linker region. Each domain contains ten cysteine residues. Mature mouse Dkk1 is a 40 kDa glycosylated protein that shares 86%, 96%, 83% and 82% amino acid (aa) sequence identity with human, rat, rabbit and bovine Dkk1, respectively.
Form	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein.
N-terminal Sequence	Ser30
Molecular Weight	26.1 kDa
Activity	Measured by its ability to inhibit Wnt-3a-induced alkaline phosphatase production by MC3T3E1 mouse osteoblastic cells. The ND50 for this effect is typically 0.2-1 µg/mL in

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the presence of 10 ng/mL of rmWnt-3a. Measured by its ability to interfere with the axis inducing activity of Xwnt-8 mRNA in early *Xenopus* embryos. In a population of embryos, the addition of 1 ng of rmDkk1 per embryo resulted in 60-100% reduction in the number of secondary axes produced by 10-20pg of Xwnt-8 mRNA. Optimal concentrations should be determined by each laboratory for each application.

Endotoxin Level	<1.0 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Reconstitution	Reconstitute at 100µg/mL in sterile PBS that containing at least 0.1% human or bovine serum albumin.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.

GENE INFORMATION

Gene Name	Dkk1 dickkopf homolog 1 (<i>Xenopus laevis</i>) [<i>Mus musculus</i>]
Official Symbol	Dkk1
Synonyms	Dkk1; dickkopf homolog 1; mddk-1; OTTMUSP00000022079; dickkopf-related protein 1; dkk-1; dickkopf-1; mCG_6758
Gene ID	13380
mRNA Refseq	NM_010051
Protein Refseq	NP_034181

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UniProt ID	Q80UL5
Chromosome Location	19
Pathway	Wnt SignalingPathway; PluriNetWork
Function	Low-density lipoprotein particle binding; receptorantagonist activity; protein binding

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