

Human DKK1 Protein

Cat. No. DKK-HM401

Description

Source	Recombinant Human DKK1 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Thr32-His266.
Accession	O94907
Molecular Weight	The protein has a predicted MW of 28.5 kDa. Due to glycosylation, the protein migrates to 45-55 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE

Formulation and Storage

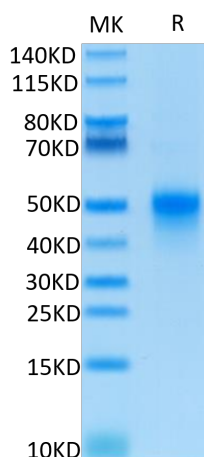
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Dickkopf related protein 1 (Dkk-1) 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. Dkk 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.

Assay Data

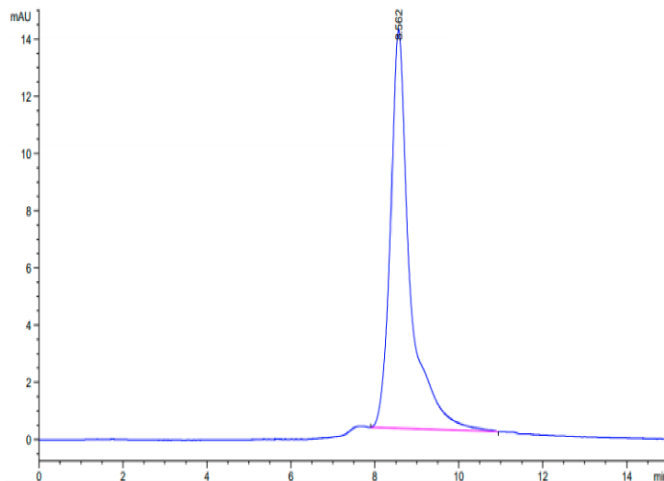
Tris-Bis PAGE



Human DKK1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data

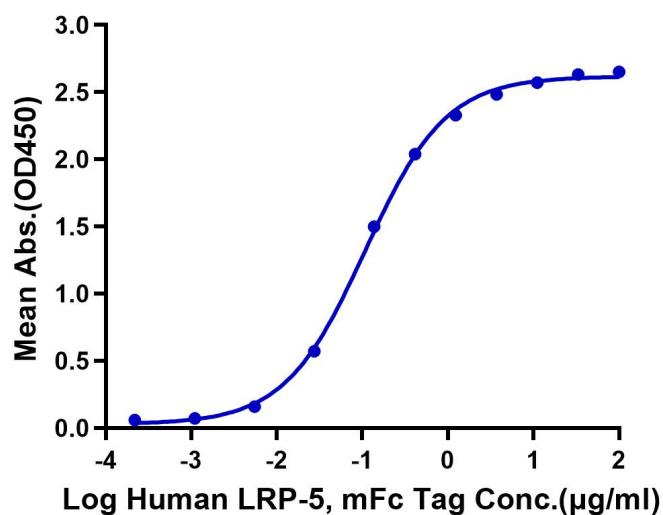


The purity of Human DKK1 is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human DKK1, His Tag ELISA

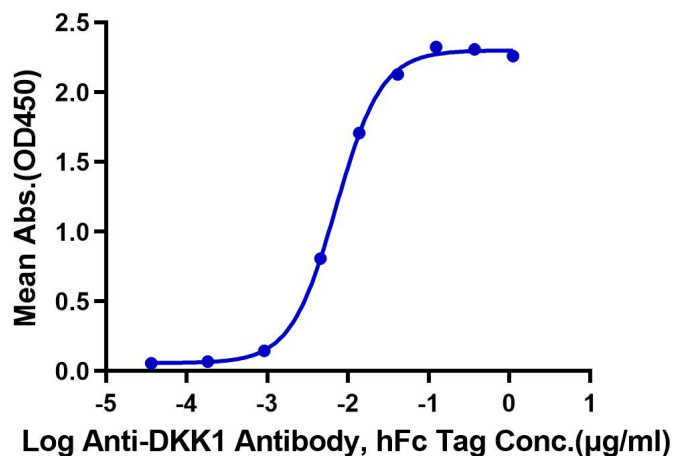
0.5µg Human DKK1, His Tag Per Well



Immobilized Human DKK1, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Human LRP-5, mFc Tag with the EC50 of 0.11µg/ml determined by ELISA.

Human DKK1, His Tag ELISA

0.02µg Human DKK1, His Tag Per Well



Immobilized Human DKK1, His Tag at 0.2µg/ml (100µl/Well) on the plate. Dose response curve for Anti-DKK1 Antibody, hFc Tag with the EC50 of 7.4ng/ml determined by ELISA.