

# Biotinylated Human DKK1 Protein

Cat. No. DKK-HM401B

## Description

<b>Source</b>	Recombinant Biotinylated Human DKK1 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Thr32-His266.
<b>Accession</b>	O94907
<b>Molecular Weight</b>	The protein has a predicted MW of 28.5 kDa. Due to glycosylation, the protein migrates to 40-50 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

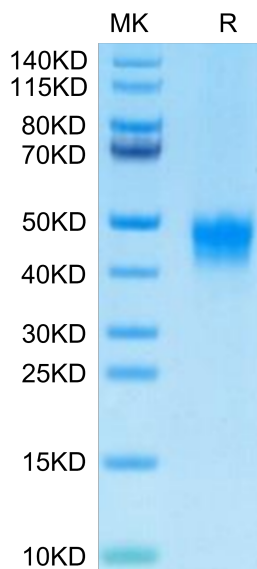
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 24 months as supplied from date of receipt. -80°C for 3 months 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

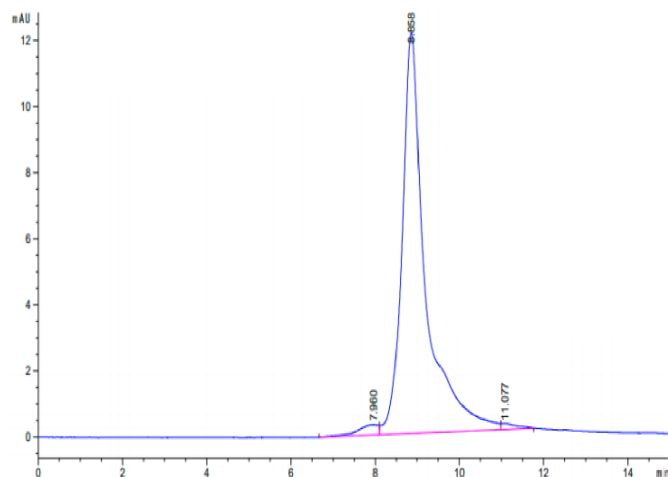
### Bis-Tris PAGE



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

### SEC-HPLC

Assay Data

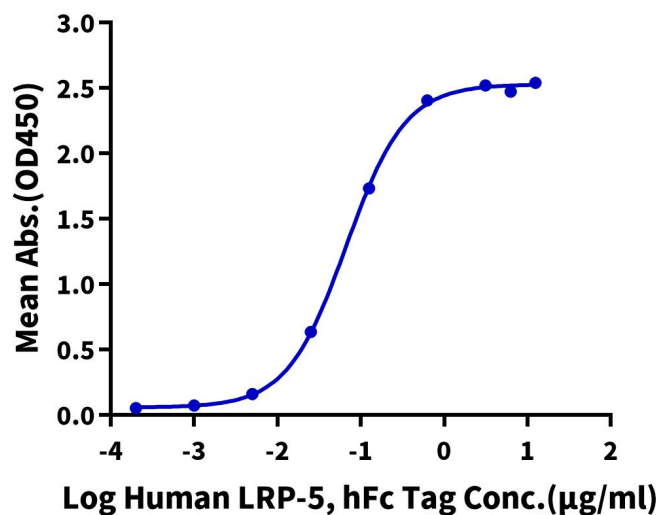


The purity of Biotinylated Human DKK1 is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Biotinylated Human DKK1, His Tag ELISA**

0.1µg Biotinylated Human DKK1, His Tag Per Well



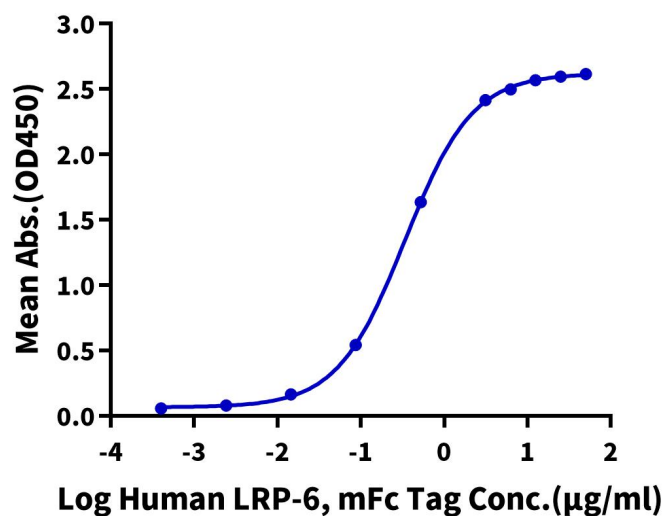
Immobilized Biotinylated Human DKK1, His Tag at 1µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Human LRP-5, hFc Tag with the EC50 of 66.8ng/ml determined by ELISA (QC Test).

ELISA Data

Assay Data

**Biotinylated Human DKK1, His Tag ELISA**

0.2µg Biotinylated Human DKK1, His Tag Per Well

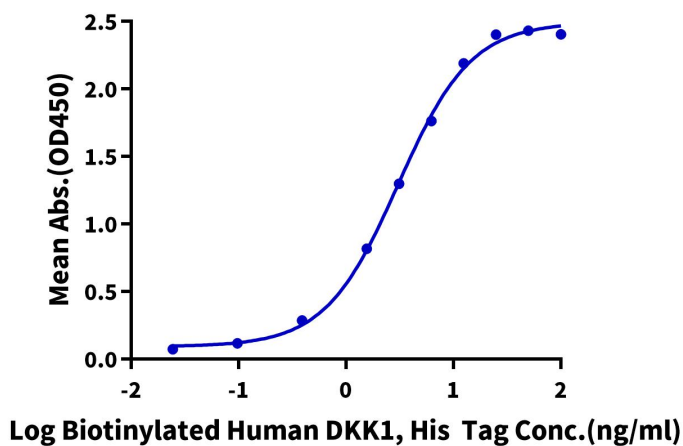


Immobilized Biotinylated Human DKK1, His Tag at 2µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Human LRP-6, mFc Tag with the EC50 of 0.34µg/ml determined by ELISA.

ELISA Data

**Biotinylated Human DKK1, His Tag ELISA**

0.05µg Anti-DKK1 Antibody, hFc Tag Per Well



Immobilized Anti-DKK1 Antibody, hFc Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Biotinylated Human DKK1, His Tag with the EC50 of 3.1ng/ml determined by ELISA.