

# Human DKK1 Protein

Cat. No. DKK-HM201

## Description

<b>Source</b>	Recombinant Human DKK1 Protein is expressed from HEK293 with hFc tag at the C-terminus. It contains Thr32-His266.
<b>Accession</b>	O94907
<b>Molecular Weight</b>	The protein has a predicted MW of 52.54 kDa. Due to glycosylation, the protein migrates to 65-80 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

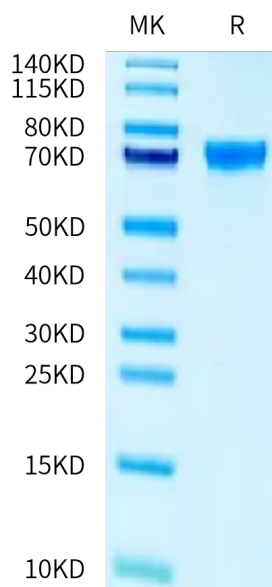
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 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

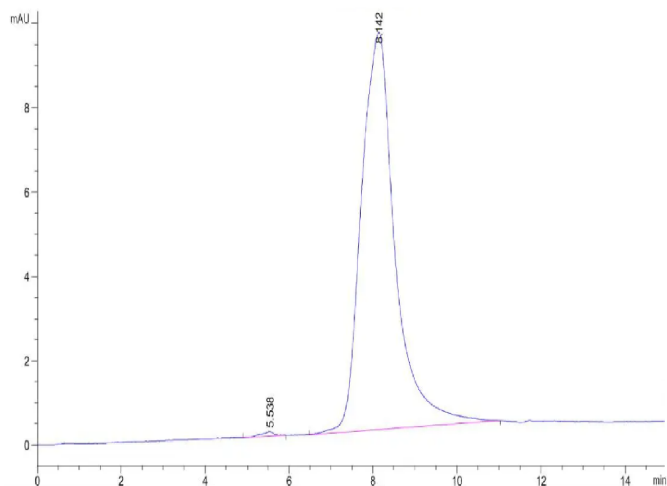
### Bis-Tris PAGE



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

### SEC-HPLC

Assay Data

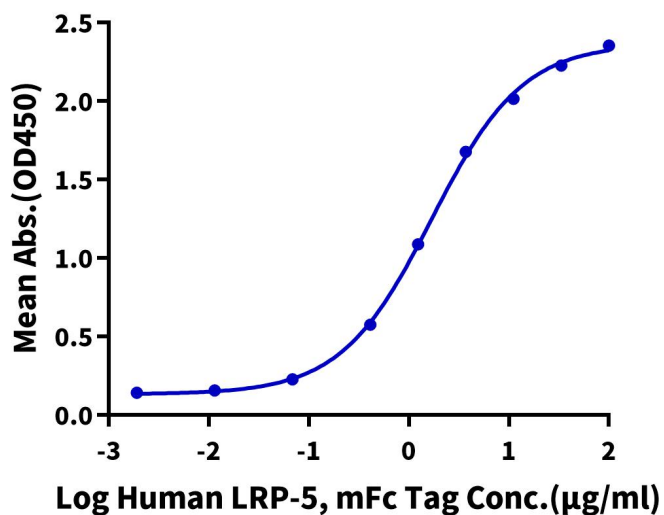


The purity of Human DKK1 is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Human DKK1, hFc Tag ELISA**

0.5  $\mu$ g Human DKK1, hFc Tag Per Well



Immobilized Human DKK1, hFc Tag at 5  $\mu$ g/ml (100  $\mu$ l/well) on the plate. Dose response curve for Human LRP-5, mFc Tag with the EC50 of 1.69  $\mu$ g/ml determined by ELISA.