

# Human LRP-5 Protein

Cat. No. LRP-HM205

## Description

<b>Source</b>	Recombinant Human LRP-5 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Glu644-Gln1263.
<b>Accession</b>	O75197-1
<b>Molecular Weight</b>	The protein has a predicted MW of 96.51 kDa. Due to glycosylation, the protein migrates to 100-115 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

<b>Formulation</b>	Supplied as 0.22 $\mu\text{m}$ filtered solution in PBS, 100mM L-arginine (pH 7.4) / PBS (pH 7.4).
<b>Storage</b>	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

A role for low-density lipoprotein-related receptor 5 (LRP5) in human bone was first established by the identification of genetic alterations that led to dramatic changes in bone mass. Shortly thereafter, mutations that altered the function of the sclerostin (SOST) gene were also associated with altered human bone mass. Subsequent studies of LRP5 and sclerostin have provided important insights into the mechanisms by which these proteins regulate skeletal homeostasis.

## Assay Data

### Bis-Tris PAGE

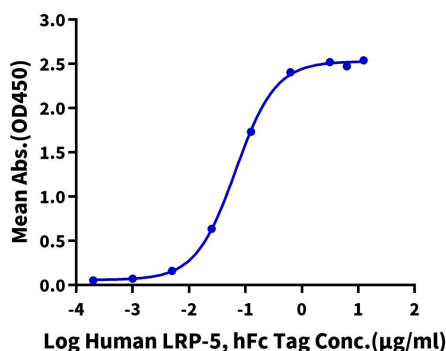


Human LRP-5 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### ELISA Data

#### Human LRP-5, hFc Tag ELISA

0.1 $\mu\text{g}$  Biotinylated Human DKK1, His Tag Per Well



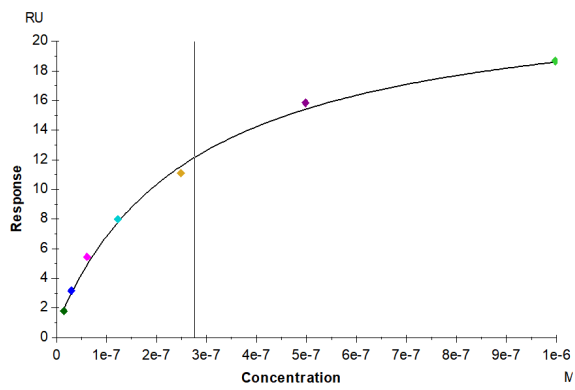
Immobilized Biotinylated Human DKK1, His Tag at 1 $\mu\text{g}/\text{ml}$  (100 $\mu\text{l}$ /well) on the streptavidin precoated plate (5 $\mu\text{g}/\text{ml}$ ). Dose response curve for Human LRP-5, hFc Tag with the EC50 of 66.8ng/ml determined by ELISA (QC Test).

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### SPR Data



Human LRP-5, hFc Tag captured on CM5 Chip via Protein A can bind Human DKK1, His Tag with an affinity constant of 0.28  $\mu\text{M}$  as determined in SPR assay (Biacore T200).