

Datasheet for ABIN6253199

**DKK1 Protein (AA 32-266) (Fc Tag,AVI tag,Biotin)**[Go to Product page](#)**2** Images

## Overview

Quantity:	200 µg
Target:	DKK1
Protein Characteristics:	AA 32-266
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DKK1 protein is labelled with Fc Tag,AVI tag,Biotin.

## Product Details

Sequence:	AA 32-266
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

## Target Details

Target:	DKK1
Alternative Name:	Dkk-1 ( <a href="#">DKK1 Products</a> )
Background:	Members of the dickkopf-related protein family (DKK-1, -2, -3, and -4) are secreted proteins with two cysteine-rich domains separated by a linker region. And DKK1 takes part in embryonic development through its inhibition of the WNT signaling pathway, binds to LRP6 with high

## Target Details

affinity and prevents the Frizzled-Wnt-LRP6 complex formation in response to Wnts. DKK1 promotes LRP6 internalization and degradation when it forms a ternary complex with the cell surface receptor Kremen. DKK1 not only functions as a head inducer during development, but also regulates joint remodeling and bone formation, which suggests roles for DKK1 in the pathogenesis of rheumatoid arthritis and multiple myeloma. More recently research reported, DKK1 impacts eye development from a defined developmental time point on, and is critical for lens separation from the surface ectoderm via  $\beta$ -catenin mediated *Pdgfra* and E-cadherin expression.

Molecular Weight: 54.0 kDa

NCBI Accession: [NP\\_036374](#)

Pathways: [WNT Signaling](#), [Regulation of Muscle Cell Differentiation](#), [Positive Regulation of fat Cell Differentiation](#)

## Application Details

**Comment:** Ready-to-use Avitag<sup>TM</sup> biotinylated protein:  
The product is exclusively produced using the Avitag<sup>TM</sup> technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA.

This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi tag in the protein is precisely controlled.

Restrictions: For Research Use only

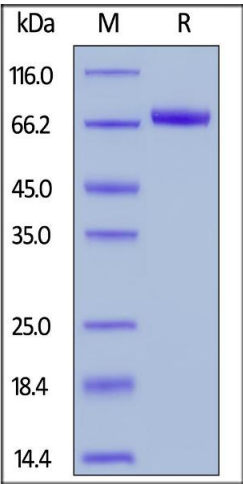
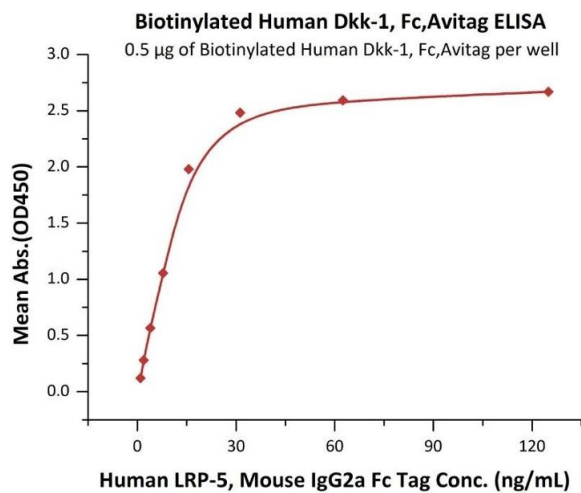
## Handling

Format: Lyophilized

Buffer: Tris with Glycine, Arginine and NaCl, pH 7.5

Handling Advice: Please avoid repeated freeze-thaw cycles.

Storage: -20 °C



ELISA

**Image 1.** Immobilized Biotinylated Human Dkk-1, Fc,Avitag (ABIN6253199,ABIN6253585) at 5 µg/mL (100 µL/well) on Streptavidin precoated (0.5 µg/well) plate, can bind Human LRP-5, Mouse IgG2a Fc Tag (ABIN6731303,ABIN6809855) with a linear range of 0.5-16 ng/mL (QC tested).

SDS-PAGE

**Image 2.** Biotinylated Human Dkk-1, Fc,Avitag on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95 % .