Datasheet for ABIN7121511

LRP5 Protein (His-Avi Tag,Biotin)

Go to Product page

Overview

Quantity:	200 µg
Target:	LRP5
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LRP5 protein is labelled with His-Avi Tag,Biotin.

Product Details

Purpose:	Biotinylated Human LRP-5 Protein, His,Avitag™
Sequence:	Glu 644 - Gln 1263
Characteristics:	Biotinylated Human LRP-5, His,Avitag (LR5-H82E6) is expressed from human 293 cells (HEK293). It contains AA Glu 644 - Gln 1263 (Accession # O75197-1).
Purity:	>95 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	LRP5
Alternative Name:	LRP-5 (LRP5 Products)
Background:	Synonyms: LRP5,LRP-5,LRP-7,LRP7,LR3, Description: Low-density lipoprotein receptor-related protein 5(LRP-5) is also known as BMND1, EVR1, EVR4, HBM, LR3, LRP7, OPPG, OPTA1, VBCH2, LDL receptor related protein 5 and PCLD4.

Target Details

	LRP5 is a transmembrane low-density lipoprotein receptor that shares a similar structure with LRP6. LRP5 acts as a co-receptor with LRP6 and the Frizzled protein family members for transducing signals by Wnt proteins through the canonical Wnt pathway. This protein plays a key role in skeletal homeostasis. Mutations in LRP5 can lead to considerable changes in bone mass. A loss-of-function mutation causes osteoporosis-pseudoglioma (decrease in bone mass), while a gain-of-function mutation causes drastic increases in bone mass.
Molecular Weight:	73.3 kDa
NCBI Accession:	NP_002326
Pathways:	WNT Signaling, Stem Cell Maintenance, Positive Regulation of fat Cell Differentiation

Application Details

Application Notes:	This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™). The protein has a calculated MW of 73.3 kDa. The protein migrates as 70-90 kDa under reducing (R) condition due to glycosylation.
Comment:	Ready-to-use Avitag™ biotinylated protein: The product is exclusively produced using the Avitag™ 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:	PBS, pH 7.4
Storage:	-20 °C
Storage Comment:	-20°C