

Datasheet for ABIN3136784

LRP5 Protein (AA 31-1383) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	LRP5
Protein Characteristics:	AA 31-1383
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LRP5 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	<p>SPLLLFANRR DVRLVDAGGV KLESTIVASG LEDAAAVDFQ FSKGAVYWTD VSEEAIKQTY LNQTGAAAQN IVISGLVSPD GLACDWVGKK LYWTDSETNR IEVANLNGTS RKVLFWQDLD QPRAIALDPA HGYMYWTDWG EAPRIERAGM DGSTRKIIVD SDIYWPNGLT IDLEEQKLYW ADAKLSFIHR ANLDGSFRQK VVEGSLTHPF ALTLSGDTLY WTDWQTRSIH ACNKWTGEQR KEILSALYSP MDIQVLSQER QPPFHTPCEE DNGGCSSLCL LSPREPFYSC ACPTGVQLQD NGKTCKTGAE EVLLARRTD LRRISLDTPD FTDIVLQVGD IRHAIAIDYD PLEGVYVWTD DEVRAIRRAY LDGSGAQTLV NTEINDPDGI AVDWVARNLY WTDGTGDRIE VTRLNGTSRK ILVSEDLDEP RAIVLHPVMG LMYWTDWGEN PKIECANLDG RDRHVLVNTS LGWPNGLALD LQEGKLYWGD AKTDKIEVIN IDGTRKRTLL EDKLPHIFGF TLLGDFIYWT DWQRRSIEVR HKVKASRDVI IDQLPDLMLG KAVNVAKVVG TNPCADGNNG CSHLCFFTPR ATKCGCPIGL ELLSDMKTCTI IPEAFVFTS RATIHRISLE TNNNDVAIPL TGVKEASALD FDVSNNHIYW TDVSLKTISR AFMNGSSVEH VIEFGLDYPE GMAVDWMGKN LYWADTGTNR IEVARLDGQF</p>
-----------	---

RQVLVWRDLD NPRSLALDPT KGYIYWTEWG GKPRIVRAFM DGTNCMTLVD KVGRANDLTI
DYADQRLYWT DLDTNMIESS NMLGQERMVI ADDLPYPFGL TQYSDYIYWT DWNLHSIERA
DKTSGRNRTL IQGHLDVMD ILVFHSSRQD GLNDCVHSNG QCGQLCLAIP GGHRCGCASH
YTLDPSSRNC SPPSTFLLFS QKFAISMIP DDQLSPDLVL PLHGLRNVKA INYDPLDKFI
YWVDGRQNIK RAKDDGTQPS MLTSPSQSL S PDRQPHDLSI DIYSRTLFWT CEATNTINVH
RLDGDAMGVV LRGDRDKPRA IAVNAERGYM YFTNMQDHAA KIERASLDGT EREVLTFTGL
IRPVALVVDN ALGKLFWVDA DLKRIESCDL SGANRLTLED ANIVQPVGLT VLGRHLYWID
RQQQMIEVE KTTGDKRTRV QGRVTHLTGI HAVEEVSL EE FSAHPCARDN GGCSHICIAK
GDGTPRCSCP VHLVLLQNLL TCGEPTCSP DQFACTTGEI DCIPGAWRCD GFPECADQSD
EEGCPVCSAS QFPCARGQCV DLRLRCDGEA DCQDRSDEAN CDAVCLPNQF RCTSGQCCLI
KQQCDSFPDC ADGSDELMCE INKPPSDDIP AHS

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Lrp5 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protParam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

Product Details

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

Target Details

Target: LRP5

Alternative Name: Lrp5 ([LRP5 Products](#))

Background: Component of the Wnt-Fzd-LRP5-LRP6 complex that triggers beta-catenin signaling through inducing aggregation of receptor-ligand complexes into ribosome-sized signalsomes. Cell-surface coreceptor of Wnt/beta-catenin signaling, which plays a pivotal role in bone formation. The Wnt-induced Fzd/LRP6 coreceptor complex recruits DVL1 polymers to the plasma membrane which, in turn, recruits the AXIN1/GSK3B-complex to the cell surface promoting the formation of signalsomes and inhibiting AXIN1/GSK3-mediated phosphorylation and destruction of beta-catenin (By similarity). Appears be required for postnatal control of vascular regression in the eye. Required for posterior patterning of the epiblast during gastrulation. {ECO:0000250, ECO:0000269|PubMed:11956231, ECO:0000269|PubMed:15142971}.

Molecular Weight: 152.3 kDa Including tag.

UniProt: [Q91VN0](#)

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

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: Protein has not been tested for activity yet. In cases in which it is highly likely that the

Application Details

recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process