

# Datasheet for ABIN3110628

## LRP5 Protein (AA 32-1615) (rho-1D4 tag)



### Overview

Quantity:	1 mg
Target:	LRP5
Protein Characteristics:	AA 32-1615
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LRP5 protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

#### **Product Details**

Sequence:

SPLLLFANRR DVRLVDAGGV KLESTIVVSG LEDAAAVDFQ FSKGAVYWTD VSEEAIKQTY
LNQTGAAVQN VVISGLVSPD GLACDWVGKK LYWTDSETNR IEVANLNGTS RKVLFWQDLD
QPRAIALDPA HGYMYWTDWG ETPRIERAGM DGSTRKIIVD SDIYWPNGLT IDLEEQKLYW
ADAKLSFIHR ANLDGSFRQK VVEGSLTHPF ALTLSGDTLY WTDWQTRSIH ACNKRTGGKR
KEILSALYSP MDIQVLSQER QPFFHTRCEE DNGGCSHLCL LSPSEPFYTC ACPTGVQLQD
NGRTCKAGAE EVLLLARRTD LRRISLDTPD FTDIVLQVDD IRHAIAIDYD PLEGYVYWTD
DEVRAIRRAY LDGSGAQTLV NTEINDPDGI AVDWVARNLY WTDTGTDRIE VTRLNGTSRK
ILVSEDLDEP RAIALHPVMG LMYWTDWGEN PKIECANLDG QERRVLVNAS LGWPNGLALD
LQEGKLYWGD AKTDKIEVIN VDGTKRRTLL EDKLPHIFGF TLLGDFIYWT DWQRRSIERV
HKVKASRDVI IDQLPDLMGL KAVNVAKVVG TNPCADRNGG CSHLCFFTPH ATRCGCPIGL
ELLSDMKTCI VPEAFLVFTS RAAIHRISLE TNNNDVAIPL TGVKEASALD FDVSNNHIYW
TDVSLKTISR AFMNGSSVEH VVEFGLDYPE GMAVDWMGKN LYWADTGTNR IEVARLDGQF

RQVLVWRDLD NPRSLALDPT KGYIYWTEWG GKPRIVRAFM DGTNCMTLVD KVGRANDLTI DYADQRLYWT DLDTNMIESS NMLGQERVVI ADDLPHPFGL TQYSDYIYWT DWNLHSIERA DKTSGRNRTL IQGHLDFVMD ILVFHSSRQD GLNDCMHNNG QCGQLCLAIP GGHRCGCASH YTLDPSSRNC SPPTTFLLFS QKSAISRMIP DDQHSPDLIL PLHGLRNVKA IDYDPLDKFI YWVDGRQNIK RAKDDGTQPF VLTSLSQGQN PDRQPHDLSI DIYSRTLFWT CEATNTINVH RLSGEAMGVV LRGDRDKPRA IVVNAERGYL YFTNMQDRAA KIERAALDGT EREVLFTTGL IRPVALVVDN TLGKLFWVDA DLKRIESCDL SGANRLTLED ANIVQPLGLT ILGKHLYWID RQQQMIERVE KTTGDKRTRI QGRVAHLTGI HAVEEVSLEE FSAHPCARDN GGCSHICIAK GDGTPRCSCP VHLVLLQNLL TCGEPPTCSP DQFACATGEI DCIPGAWRCD GFPECDDQSD EEGCPVCSAA QFPCARGQCV DLRLRCDGEA DCQDRSDEAD CDAICLPNQF RCASGQCVLI KQQCDSFPDC IDGSDELMCE ITKPPSDDSP AHSSAIGPVI GIILSLFVMG GVYFVCQRVV CQRYAGANGP FPHEYVSGTP HVPLNFIAPG GSQHGPFTGI ACGKSMMSSV SLMGGRGGVP LYDRNHVTGA SSSSSSSTKA TLYPPILNPP PSPATDPSLY NMDMFYSSNI PATARPYRPY IIRGMAPPTT PCSTDVCDSD YSASRWKASK YYLDLNSDSD PYPPPPTPHS QYLSAEDSCP PSPATERSYF HLFPPPPSPC TDSS

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.
- Human 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 receival 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:	Three step purification of membrane proteins expressed in baculovirus infected SF9 insect
	cells:
	<ol> <li>Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot.</li> </ol>
	2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate
	fractions are analyzed by Western blot.  3. Protein containing fractions of the best purification are subjected to second purification step
	through size exclusion chromatograph. 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. Appears be required for postnatal control of vascular regression in
	the eye. Required for posterior patterning of the epiblast during gastrulation.
	{ECO:0000269 PubMed:11336703, ECO:0000269 PubMed:11448771,
	ECO:0000269 PubMed:14727154, ECO:0000269 PubMed:14731402,
	ECO:0000269 PubMed:15778503}.
Molecular Weight:	177.2 kDa Including tag.

### **Target Details**

UniProt:	075197
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 gurantee though.
Comment:	In cases in which it is highly likely that the 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)