

Datasheet for ABIN3136785

LRP5 Protein (AA 31-1614) (rho-1D4 tag)



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1 Image

Overview

Quantity:	1 mg
Target:	LRP5
Protein Characteristics:	AA 31-1614
Origin:	Mouse
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:	<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 LRRISLTPD FTDIVLQVGD IRHAIAIDYD PLEGVYVWTD DEVRAIRRAY LDGSGAQLTV NTEINDPDGI AVDWVARNLY WTDGTGTDRIE VTRLNGTSRK ILVSEDLDEP RAIVLHPVMG LMYWTDWGEN PKIECANLDG RDRHVLVNTS LGWPNGLALD LQEGKLYWGD AKTDKIEVIN IDGTRKRTLL EDKLPHIFGF TLLGDFIYWT DWQRRSIEVR HKVKASRDVI IDQLPDLMLG KAVNVAKVVG TNPCADGNNG CSHLCFFTPR ATKCGCPIGL ELLSDMKTCI IPEAFVFTS RATIHRISLE TNNNDVAIPL TGVKEASALD FDVSNNHIYW TDVSLKTISR AFMNGSSVEH VIEFGLDYPE GMAVDWMGKN LYWADTGTNR IEVARLDGQF </p>
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RQVLVWRDLN NPRSLALDPT KGYIYWTEWG GKPRIVRAFM DGTNCMTLVD KVGRANDLTI
DYADQRLYWT DLDTNMIESS NMLGQERMVI ADDLPYPFGL TQYSDYIYWT DWNLHSIERA
DKTSGRNRTL IQGHLDVMD ILVFHSSRQD GLNDCVHSNG QCGQLCLAIP GGHRGCGASH
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 HAVEEVSLEE FSAHPCARDN GGCSHICIAK
GDGTPRCSCP VHLVLLQNLL TCGEPTCSP DQFACTTGEI DCIPGAWRCD GFPECADQSD
EEGCPVCSAS QFPCARGQCV DLRLRCDGEA DCQDRSDEAN CDAVCLPNQF RCTSGQCVELI
KQQCDSFPDC ADGSDELMCE INKPPSDDIP AHSSAIGPVI GIILSLFVMG GYVFVCQRVM
CQRYTGASGP FPHEYVGGAP HVPLNFIAPG GSQHGPFGI PCSKSVMSM SLVGGRGSVP
LYDRNHVTGA SSSSSSSTKA TLYPPILNPP PSPATDPSLY NVDVFYSSGI PATARPYRPY
VIRGMAPPTT PCSTDVCDSD YTSRWKSSK YYLDLNSDSD PYPPPPTPHS QYLSAEDSCP
PSPGTERSYC 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.
- 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

Product Details

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:	<p>Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells:</p> <ol style="list-style-type: none">1. Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot.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:	<p>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}.</p>
Molecular Weight:	177.0 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 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