

Datasheet for ABIN3136906

## LRP8 Protein (AA 29-996) (rho-1D4 tag)



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### 1 Image

#### Overview

Quantity:	1 mg
Target:	LRP8
Protein Characteristics:	AA 29-996
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LRP8 protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

#### Product Details

Sequence:	<p>DPLPGGQGPV KECEEDQFRC RNERCIPLVW RCDEDNDCSD NSDEDDCPKR TCADSDFTCD</p> <p>NGHCIPERWK CDGEECPDG SDESKATCSS EECPAEKLSC GPTSHKCVPA SWRCDGEKDC</p> <p>EGGADEAGCP TLCAPHEFQC SNRSCLASVF VCDGDDDCGD GSDERGCS DP ACPPREFRCG</p> <p>GGGTCIPERW VCDRQFDCED RSDEAAELCG RAGQGTTATP AACAPTAQFT CRSGECIHLG</p> <p>WRCDGDRDCK DKSDEADCSP GPCRENEFQC GDGTCVLAIK RCNQERDCPD GSDEAGCLQE</p> <p>STCEGPRRFQ CKSGECVDGG KVCDDQRDCR DWSDEPQKVC GLNECLHNNG GCSHICTDLK</p> <p>IGFECTCPAG FQLLDQKTCG DIDECDPDA CSQICVNYKG YFKCECHPGY EMDTLTKNCK</p> <p>AVAGKSPSLI FTNRHEVRRI DLVKRDYSRL IPMLKNVVAL DVEVATNRIY WCDLSYRKIY</p> <p>SAHMDKASIP DEQVVLIDEQ LHSPEGLAVD WWHKHIIWTD SGNKTISVAT TDGRRRCTLF</p> <p>SRELSEPRAI AVDPLRGFMY WSDWGFQAKI EKAGLNGADR QTLVSDNIEW PNGITLDLLS</p> <p>QRLYWVDSKL HQLSSIDFNG GNRKMLIFST DFLSHPGFVA VFEDKVFWD LENEAFSAN</p> <p>RLNGLEIAL AENLNNPHDI VIFHELKQPK AADACDLSAQ PNGGCEYLCL PAPQISSHSP</p>
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KYTCACPD TM WLGPDMKRCY RAPQSTSTTT LASAMTRTVP ATTRAPGTTI HDPTYQNHST  
ETPSQTAAAP HSVNVPRAPS TSPSTPSPAT SNHSQHYGNE GSQMGSTVTA AVIGVIVPIV  
VIALLCMSGY LIWRNWKRKN TKSMNFDNPV YRKTTEEEEE DELHIGRTAQ IGHVYPAAIS  
NYDRPLWAEP CLGETRDLED PAPALKELFV LPGEPRSQLH QLPKNPLSEL PVVKCKRVAL  
SLEDDGLP

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

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Lrp8 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.

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### Purification:

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

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

## Product Details

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: LRP8

Alternative Name: Lrp8 ([LRP8 Products](#))

Background: Cell surface receptor for Reelin (RELN) and apolipoprotein E (apoE)-containing ligands. LRP8 participates in transmitting the extracellular Reelin signal to intracellular signaling processes, by binding to DAB1 on its cytoplasmic tail. Reelin acts via both the VLDL receptor (VLDLR) and LRP8 to regulate DAB1 tyrosine phosphorylation and microtubule function in neurons. LRP8 has higher affinity for Reelin than VLDLR. LRP8 is thus a key component of the Reelin pathway which governs neuronal layering of the forebrain during embryonic brain development. Binds the endoplasmic reticulum resident receptor-associated protein (RAP). Binds dimers of beta 2-glycoprotein I and may be involved in the suppression of platelet aggregation in the vasculature. Highly expressed in the initial segment of the epididymis, where it affects the functional expression of clusterin and phospholipid hydroperoxide glutathione peroxidase (PHGPx), two proteins required for sperm maturation. May also function as an endocytic receptor. {ECO:0000269|PubMed:12695510}.

Molecular Weight: 108.0 kDa Including tag.

UniProt: [Q924X6](#)

## 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

## Application Details

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