

Datasheet for ABIN3114432

DDR1 Protein (AA 19-913) (rho-1D4 tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	DDR1
Protein Characteristics:	AA 19-913
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DDR1 protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	DADMKGHFDP AKCRYALGMQ DRTIPDS DIS ASSSWSDSTA ARHSRLESSD GDGAWCPAGS VFPKEEYLQ VDLQRLHLVA LVGTQGRHAG GLGKEFSRSY RLRYSRDGRR WMGWKDRWGQ EVISGNEDPE GVVLKDLGPP MVARLVRFYP RADRVMSVCL RVELYGCLWR DGLLSYAPV GQTMYLSEAV YLNDSTYDGH TVGGLQYGGL GQLADGVVGL DDFRKSQELR VWPGYDYVGW SNHSFSSGYV EMEFEFDR LR AFQAMQVHCN NMHTLGARLP GGVECRFRRG PAMAWEGEPM RHNLGGNLGD PRARAVSVPL GGRVARFLQC RFLFAGPWLL FSEISFISDV VNNSSPALGG TFPPAPWWPP GPPPTNFSSL ELEPRGQQPV AKAEGSPTAI LIGCLVAIL LLLLIALLML WRLHWRRLLS KAERRVLEEE LTVHLSVPGD TILINNRPGP REPPPYQEPR PRGNPPHSAP CVPNGSALLL SNPAYRLLLA TYARPPRPGP PPTPAWAKPT NTQAYSGDYM EPEKPGAPLL PPPPQNSVPH YAEADIVTLQ GVTGGNTYAV PALPPGAVGD GPPRVDFPRS RLRFEKLGE GQFGEVHLCE VDSPQDLVSL DFPLNVRKGH PLLVAVKILR PDATKNARND FLKEVKIMSR LKDPNIIRLL GVCVQDDPLC MITDYMENG D LNQFLSAHQL EDKAAEGAPG DGQAAQGPTI
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SYPMLLHVAA QIASGMRYLA TLNFBVHRLA TRNCLVGENF TIKIADFGMS RNLYAGDYR
VQGRAVLPIR WMAWECILMG KFTTASDVWA FGVTLWEVLM LCRAQPFQQL TDEQVIENAG
EFFRDQGRQV YLSRPPACPQ GLYELMLRCW SRESEQRPPF SQLHRFLAED ALNTV

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 DDR1 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:

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

1. Membrane proteins are fractionated 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.
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Product Details

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:	DDR1
Alternative Name:	DDR1 (DDR1 Products)
Background:	<p>Tyrosine kinase that functions as cell surface receptor for fibrillar collagen and regulates cell attachment to the extracellular matrix, remodeling of the extracellular matrix, cell migration, differentiation, survival and cell proliferation. Collagen binding triggers a signaling pathway that involves SRC and leads to the activation of MAP kinases. Regulates remodeling of the extracellular matrix by up-regulation of the matrix metalloproteinases MMP2, MMP7 and MMP9, and thereby facilitates cell migration and wound healing. Required for normal blastocyst implantation during pregnancy, for normal mammary gland differentiation and normal lactation. Required for normal ear morphology and normal hearing (By similarity). Promotes smooth muscle cell migration, and thereby contributes to arterial wound healing. Also plays a role in tumor cell invasion. Phosphorylates PTPN11. {ECO:0000250, ECO:0000269 PubMed:12065315, ECO:0000269 PubMed:16234985, ECO:0000269 PubMed:16337946, ECO:0000269 PubMed:19401332, ECO:0000269 PubMed:20093046, ECO:0000269 PubMed:20432435, ECO:0000269 PubMed:20884741, ECO:0000269 PubMed:21044884, ECO:0000269 PubMed:9659899}.</p>
Molecular Weight:	100.5 kDa Including tag.
UniProt:	Q08345
Pathways:	RTK Signaling, Smooth Muscle Cell Migration

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:	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

Application Details

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