

Datasheet for ABIN3114541

PTPRJ Protein (AA 36-1337) (rho-1D4 tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	PTPRJ
Protein Characteristics:	AA 36-1337
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PTPRJ protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	AGGTPSPIPD PSVATVATGE NGITQISSTA ESFHKQNGTG TPQVETNTSE DGESSGANDS LRTPEQGSNG TDGASQKTPS STGPSPVFDI KAVSISPTNV ILTWKSNDA ASEYKYVVKH KMENEKTITV VHQPWCNITG LRPATSYVFS ITPGIGNETW GDPRVIKVIT EPIPVSDLRV ALTGVRKAAL SWSNGNGTAS CRVLLESIGS HEELTQDSRL QVNISGLKPG VQYNINPYLL QSNKTKGDPL GTEGGLDASN TERSRAGSPT APVHDESLVG PVDPPSSGQQS RDTEVLLVGL EPGTRYNATV YSQAANGTEG QPQAI EFRTN AIQVFDVTAV NISATSLTLI WKVSDNESSS NYTYKIHVAG ETDSSNLNVS EPRAVIPGLR SSTFYINITVC PVLGDIEGTP GFLQVHTPPV PVSDFRVTVV STTEIGLAWS SHDAESFQMH ITQEGAGNSR VEITTNQSII IGGLFPGTKY CFEIVPKGPN GTEGASRTVC NRTVPSAVFD IHVVYVTTTE MWLDWKSPDG ASEYVYHLVI ESKHGSNHTS TYDKAITLQG LIPGTLNIT ISPEVDHVGW DPNSTAQYTR PSNVSNIDVS TNTTAATLSW QNFDDASPTY SYCLLIEKAG NSSNATQVVT DIGITDATVT ELIPGSSYTV EIFAQVGDGI KSLEPGRKSF CTDPMASAF DCEVVPKEPA LVLKWTCP PG ANAGFELEVS
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SGAWNATHL ESCSSENGTE YRTEVTYLNF STSYNISITT VSCGKMAAPT RNTCTTGITD
PPPPDGSPNI TSVSHNSVKV KFSGFEASHG PIKAYAVILT TGEAGHPSAD VLKYTYEDFK
KGASDTYVTY LIRTEEKGRS QSLSEVLKYE IDVGNESTTL GYYNGKLEPL GSYRACVAGF
TNITFHPQNK GLIDGAESYV SFSRYSDAVS LPQDPGVICG AVFGCIFGAL VIVTVGGFIF
WRKKRKDAKN NEVSFSQIKP KSKSLIRVEN FEAYFKKQQA DSNCGFAEEY EDLKLVGISQ
PKYAAELAEN RGKNRYNNVL PYDISRVKLS VQTHSTDDYI NANYMPGYHS KKDFIATQGP
LPNTLKDFWR MVWEKNVYAI IMLTKCVEQG RTKCEEYWPS KQAQDYGDIT VAMTSEIVLP
EWTIRDFTVK NIQTSESHPL RQFHFTSWPD HGVPDTTDLL INFRYLVRDY MKQSPPEPI
LVHCSAGVGR TGTFIADRL IYQIENENTV DVYGIVYDLR MHRPLMVQTE DQYVFLNQC
LDIVRSQKDS KVDLIYQNTT AMTIYENLAP VTTFGKTNGY IA

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 PTPRJ 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:

Product Details

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: PTPRJ

Alternative Name: PTPRJ ([PTPRJ Products](#))

Background: Tyrosine phosphatase which dephosphorylates or contributes to the dephosphorylation of CTNND1, FLT3, PDGFRB, MET, RET (variant MEN2A), KDR, LYN, SRC, MAPK1, MAPK3, EGFR, TJP1, OCLN, PIK3R1 and PIK3R2. Plays a role in cell adhesion, migration, proliferation and differentiation. Involved in vascular development. Regulator of macrophage adhesion and spreading. Positively affects cell-matrix adhesion. Positive regulator of platelet activation and thrombosis. Negative regulator of cell proliferation. Negative regulator of PDGF-stimulated cell migration, through dephosphorylation of PDGFR. Positive regulator of endothelial cell survival, as well as of VEGF-induced SRC and AKT activation, through KDR dephosphorylation. Negative regulator of EGFR signaling pathway, through EGFR dephosphorylation. Enhances the barrier function of epithelial junctions during reassembly. Negatively regulates T-cell receptor (TCR) signaling. Upon T-cell TCR activation, it is up-regulated and excluded from the immunological synapses, while upon T-cell-antigen presenting cells (APC) disengagement, it is no longer excluded and can dephosphorylate PLCG1 and LAT to down-regulate prolongation of signaling. {ECO:0000269|PubMed:10821867, ECO:0000269|PubMed:11259588, ECO:0000269|PubMed:12062403, ECO:0000269|PubMed:12370829, ECO:0000269|PubMed:12475979, ECO:0000269|PubMed:12913111, ECO:0000269|PubMed:14709717, ECO:0000269|PubMed:16682945, ECO:0000269|PubMed:16778204, ECO:0000269|PubMed:18348712,

Target Details

ECO:0000269|PubMed:18936167, ECO:0000269|PubMed:19332538,
ECO:0000269|PubMed:19494114, ECO:0000269|PubMed:19836242,
ECO:0000269|PubMed:19922411, ECO:0000269|PubMed:21091576,
ECO:0000269|PubMed:21262971, ECO:0000269|PubMed:9531590,
ECO:0000269|PubMed:9780142}.

Molecular Weight: 143.2 kDa Including tag.

UniProt: [Q12913](#)

Pathways: [EGFR Signaling Pathway](#), [Platelet-derived growth Factor Receptor Signaling](#)

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 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)



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