



[Go to Product page](#)

Datasheet for ABIN3135602  
**PTPRJ Protein (AA 29-1238) (rho-1D4 tag)**

### Overview

Quantity:	1 mg
Target:	PTPRJ
Protein Characteristics:	AA 29-1238
Origin:	Mouse
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: RQGQVLCAGA APNPIFDIEA VVSPTSULLT WKHNDSGASE CRIENKMESN LTFPVKNQTS  
CNITGLSPGT SYTFSISVT TNETLNKTIT TEPWPVSDLH VTSVGVTPAR LTWSNANGTA  
SYRMLIEELT THSSVNISGL KPGTNNSFAF PESNETQADF AVAAEVPDAN GTKRIPVTNL  
SQLHKNSLVS VDPPSGQDPS LTEILLTDLK PDTQYNATY SQAANGTEGQ PRNKVFKTNS  
TQVSDVRAMN ISASSMTLW KSNYDGSRTS IVYKIHVAGG THSVNQTVNK TEAILGLSS  
STLYNITVHP FLGQTEGTPG FLQVYTPDQ VSDFRVTNVS TRAILAWRS NDSKSFEIFI  
KQDGGKHRN ASTGNQSYMV EDLKPGETSYH FEIIPRPGDG TEGLSSTVNG STDPSAVTDI  
RVVNISTTEM QLEWQNTDDA SGYTYHLVLE SKSGSIIRTN SSQKWITVGS LTPGTYLNV  
IFPEVDQIQG ISNSITQYTR PSSVSHIEVN TTTTAAIRW KNEDAASASY AYSVLILKTG  
DGSNVTSNFT KDPSILPEL IPGVSYTVKI LTQVGDGTTT LVPGWNLFCF EPEVTSFHC  
EVPKPEALV LKWACPFMY TGFELGVRSD SWDNMTRLEN CTSDDDTECR TEVAYLNFST  
SYNISIATLS CGKMALPAQN ICTTGITDPP TPDGSPNITS VSHNSVKVKF SGFEASHGPI

KAYAVILTTG EAAQPSADVL KYTYEDFKRG ASDTYVTYLI RIEEKQSQG LSEVLNYEID  
VGNQSTTLGY YNGRLEPLGS YRACVAGFTN ITYNLQNDGL INGDESYVSF SPYSEAVFLP  
QDPGVICGAV FGCIFGALAI TAVGGFIFWR KKRTDAKNNE VSFSQIKPKK SKLIRVENFE  
AYFKKQQADS NCGFAEEYED LKLIGISLPK YTAEIAENRG KNRYNNVLPY DISRVKLSVQ  
THSTDDYINA NYMPGYHSKK DFIATQGPLP NTLKDFWRMV WEKNVYAIMV LTKCVEQGRT  
KCEEYWPSKQ AQDYGDITVA MTSEVVLPEW TIRDFVVKNM QNSESHPRLRQ FHFTSWPDHG  
VPDITDLLIN FRYLVRDYMK QIPPESPILV HCSAGVGRTG TFIADRLLY QIENENTVDV  
YGIVYDLRMH RPLMVQTEDQ YVFLNQCULD IIRAQKDSKV DLIYQNTTAM TIYENLEPVS  
MFGKTNGYIA

**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 Ptpmj 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

## Product Details

---

- different detergents (detergent screen). Samples are analyzed by Western blot.
- 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.
  - 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: Ptprij ([PTPRJ Products](#))

---

Background: Tyrosine phosphatase which dephosphorylates or contributes to the dephosphorylation of CTNND1, FLT3, PDGFRB, MET, RET, 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. May be involved in the mechanism of contact inhibition of cell growth. 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:12588999, ECO:0000269|PubMed:12771128, ECO:0000269|PubMed:12833140, ECO:0000269|PubMed:12913111, ECO:0000269|PubMed:18249142, ECO:0000269|PubMed:19246339, ECO:0000269|PubMed:19268662}.

---

Molecular Weight: 134.8 kDa Including tag.

---

## Target Details

---

UniProt: [Q64455](#)

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: 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)