

## Datasheet for ABIN3094859

# PTPRJ Protein (AA 36-975) (His tag)



#### Overview

Quantity:	1 mg
Target:	PTPRJ
Protein Characteristics:	AA 36-975
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PTPRJ protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

### **Product Details**

#### Sequence:

AGGTPSPIPD PSVATVATGE NGITQISSTA ESFHKQNGTG TPQVETNTSE DGESSGANDS
LRTPEQGSNG TDGASQKTPS STGPSPVFDI KAVSISPTNV ILTWKSNDTA ASEYKYVVKH
KMENEKTITV VHQPWCNITG LRPATSYVFS ITPGIGNETW GDPRVIKVIT EPIPVSDLRV
ALTGVRKAAL SWSNGNGTAS CRVLLESIGS HEELTQDSRL QVNISGLKPG VQYNINPYLL
QSNKTKGDPL GTEGGLDASN TERSRAGSPT APVHDESLVG PVDPSSGQQS RDTEVLLVGL
EPGTRYNATV YSQAANGTEG QPQAIEFRTN AIQVFDVTAV NISATSLTLI WKVSDNESSS
NYTYKIHVAG ETDSSNLNVS EPRAVIPGLR SSTFYNITVC PVLGDIEGTP GFLQVHTPPV
PVSDFRVTVV STTEIGLAWS SHDAESFQMH ITQEGAGNSR VEITTNQSII IGGLFPGTKY
CFEIVPKGPN GTEGASRTVC NRTVPSAVFD IHVVYVTTTE MWLDWKSPDG ASEYVYHLVI
ESKHGSNHTS TYDKAITLQG LIPGTLYNIT ISPEVDHVWG DPNSTAQYTR PSNVSNIDVS
TNTTAATLSW QNFDDASPTY SYCLLIEKAG NSSNATQVVT DIGITDATVT ELIPGSSYTV
EIFAQVGDGI KSLEPGRKSF CTDPASMASF DCEVVPKEPA LVLKWTCPPG ANAGFELEVS

SGAWNNATHL ESCSSENGTE YRTEVTYLNF STSYNISITT VSCGKMAAPT RNTCTTGITD PPPPDGSPNI TSVSHNSVKV KFSGFEASHG PIKAYAVILT TGEAGHPSAD VLKYTYEDFK KGASDTYVTY LIRTEEKGRS QSLSEVLKYE IDVGNESTTL GYYNGKLEPL GSYRACVAGF TNITFHPQNK GLIDGAESYV SFSRYSDAVS LPQDPGVICG

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 receival 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:

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

- 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
- Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

### **Product Details**

Sterility:	0.22 μm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

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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,
	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:	101.2 kDa Including tag.

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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 gurantee 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)