

# Human PRL-1/PTP4A1 Protein

Cat. No. PRL-HE101

## Description

<b>Source</b>	Recombinant Human PRL-1/PTP4A1 Protein is expressed from E.coli with His tag at the N-Terminus. It contains Met1-Cys170.
<b>Accession</b>	Q93096
<b>Molecular Weight</b>	The protein has a predicted MW of 20.56 kDa same as Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

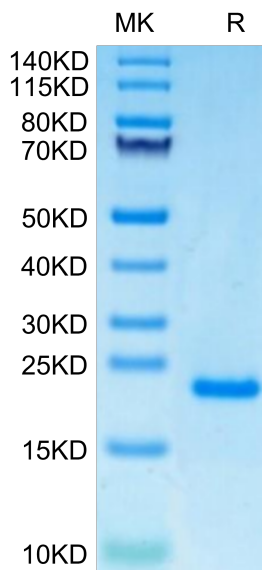
<b>Formulation</b>	Supplied as 0.22 $\mu\text{m}$ filtered solution in 20mM Tris, 250mM NaCl, 1mM DTT, 20% Glycerol (pH 7.4).
<b>Storage</b>	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Phosphatases of regenerating liver (PRL-1, PRL-2, and PRL-3, also known as PTP4A1, PTP4A2, and PTP4A3) control magnesium homeostasis through an association with the CNNM magnesium transport regulators. PRL-1 (PTP4A1) is a key molecule that activates tyrosine phosphorylation, which is important for cancer progression and metastasis.

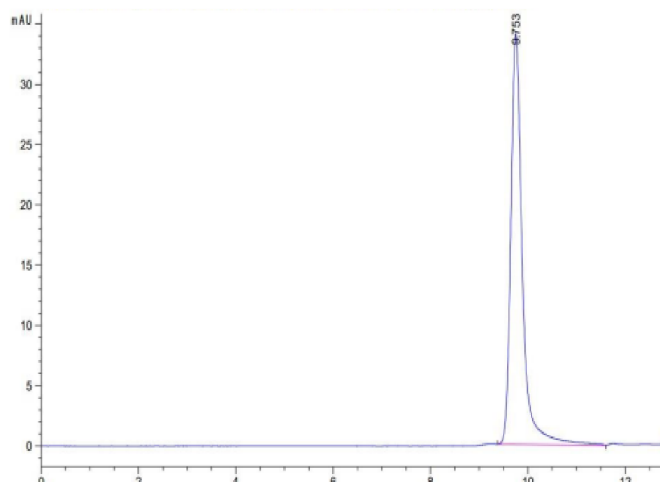
## Assay Data

### Bis-Tris PAGE



Human PRL-1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



The purity of Human PRL-1 is greater than 95% as determined by SEC-HPLC.

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#### Bioactivity Data

Measured by its ability to cleave a substrate. p-Nitrophenyl phosphate (pNPP). The specific activity is > 0.5 pmol/min/μg.