



Protein Tyrosine Phosphatase PTP4A2

Product Data Sheet

For Research Use Only, Not for use in diagnostic procedures

## Protein Tyrosine Phosphatase PTP4A2

Human, recombinant protein expressed in *E. coli*, Active  
Cat# CY-E1341

Amount: 50µg (5.1µg/µl)

Lot:

### Introduction:

PTPs are cell signaling molecules that play regulatory roles in a variety of cellular processes. PTP 4A family contains a protein tyrosine phosphatase (PTPase) domain and a characteristic C-terminal prenylation motif. PTP4A2 has been shown to primarily associate with plasmic and endosomal membrane through its C-terminal prenylation. PTP4A2 was found to interact with the beta-subunit of Rab geranylgeranyltransferase II (beta GGT II), and thus may function as a regulator of GGT II activity. Overexpression of this gene in mammalian cells conferred a transformed phenotype, which suggested its role in tumorigenesis. Alternatively spliced transcript variants that encode two distinct isoforms have been described.

### Product Description:

Full length of human PTP4A2 and an N-terminal GST tag, expressed in *E. coli*. and purified by GSH agarose chromatography.

### Gene Information:

The gene/protein accession number is NM\_080391/NP\_536316.

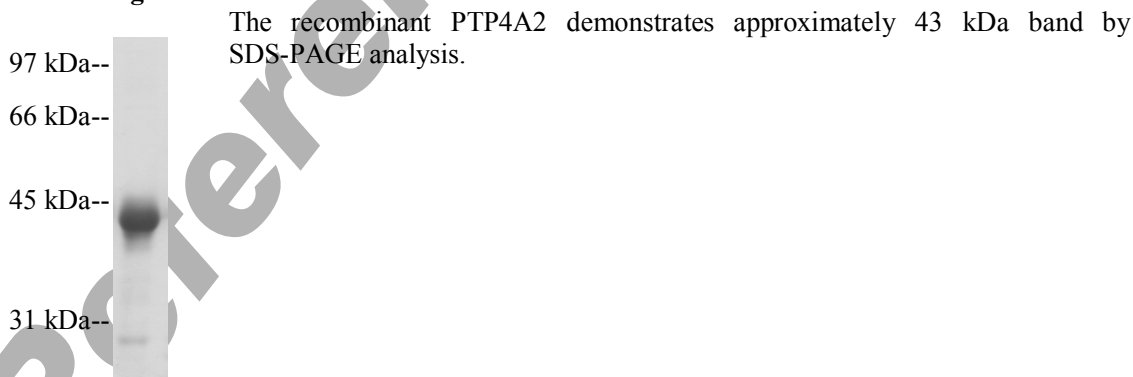
### Gene Aliases:

protein tyrosine phosphatase type IVA member 2, HU-PP-1, PTPCAAX2, OV-1, PRL-2

### Formulation:

The recombinant protein is supplied frozen in a buffer containing 100mM NaCl, 20mM Tris-HCl (pH 7.0), 1mM DTT, 1mM EDTA and 50% glycerol. Use a same buffer for dilution when needed.

### Molecular Weight:



Coomassie blue stain



## Protein Tyrosine Phosphatase PTP4A2

### Product Data Sheet

**For Research Use Only, Not for use in diagnostic procedures**

#### **Specific Activity:**

0.19 units/ $\mu$ g. This unit value is determined at the point of production and may vary with time and various conditions. Specific Activity also varies among production lots.

#### **Unit Definitions:**

One unit is defined as the amount of phosphatase required to release 1 pmol of phosphate from CycLex's PTP substrate-1 per minute at 30°C.

#### **Storage:**

Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, AVOID REPEATED HANDLING AND MULTIPLE FREEZE/THAW CYCLES.

#### **Stability:**

Unopened vial at -70 °C, for 1 year after delivery.

#### **References:**

1. Zhao Z, Lee CC, Monckton DG, Yazdani A, Coolbaugh MI, Li X, Bailey J, Shen Y, Caskey CT. "Characterization and genomic mapping of genes and pseudogenes of a new human protein tyrosine phosphatase". Genomics 35 (1): 172-81, 1996.
2. Zeng Q, Hong W, Tan YH. "Mouse PRL-2 and PRL-3, two potentially prenylated protein tyrosine phosphatases homologous to PRL-1". Biochem Biophys Res Commun 244 (2): 421-7, 1998.

#### **PRODUCED BY**

CycLex Co., Ltd.  
1063-103 Terasawaoka  
Ina, Nagano 396-0002  
Japan  
Fax: +81-265-76-7618  
e-mail: [info@cyclex.co.jp](mailto:info@cyclex.co.jp)  
URL: <http://www.cyclex.co.jp>

CycLex/CircuLex products are supplied for research use only. CycLex/CircuLex products and components thereof may not be resold, modified for resale, or used to manufacture commercial products without prior written approval from CycLex Co., Ltd. To inquire about licensing for such commercial use, please contact us via email.