

## PTP4A2 Protein, Human (His)

<b>Cat. No.:</b>	HY-P71245
<b>Synonyms:</b>	Protein tyrosine phosphatase type IVA 2; PTP4A2; HU-PP-1; OV-1; PTP(CAAXII); Protein-tyrosine phosphatase 4a2; Protein-tyrosine phosphatase of regenerating liver 2; PRL-2
<b>Species:</b>	Human
<b>Source:</b>	E. coli
<b>Accession:</b>	Q12974 (M1-Q167)
<b>Gene ID:</b>	8073
<b>Molecular Weight:</b>	Approximately 20 kDa

### PROPERTIES

<b>AA Sequence</b>	<p>M N R P A P V E I S      Y E N M R F L I T H      N P T N A T L N K F      T E E L K K Y G V T</p> <p>T L V R V C D A T Y      D K A P V E K E G I      H V L D W P F D D G      A P P P N Q I V D D</p> <p>W L N L L K T K F R      E E P G C C V A V H      C V A G L G R A P V      L V A L A L I E C G</p> <p>M K Y E D A V Q F I      R Q K R R G A F N S      K Q L L Y L E K Y R      P K M R L R F R D T</p> <p>N G H C C V Q</p>
<b>Biological Activity</b>	Measured by its ability to cleave a substrate, p-Nitrophenyl phosphate (pNPP), which can be measured by absorbance at 410 nm. The specific activity is 158.928 pmol/min/μg, as measured under the described conditions.
<b>Appearance</b>	Lyophilized powder.
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution of 50 mM Tris-HCL, 300 mM NaCl, pH 7.4.
<b>Endotoxin Level</b>	<1 EU/μg, determined by LAL method.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH <sub>2</sub> O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
<b>Storage &amp; Stability</b>	Stored at -20°C for 2 years from date of receipt. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
<b>Shipping</b>	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

<b>Background</b>	PTP4A2 protein, a potent protein tyrosine phosphatase, plays a pivotal role in stimulating the progression from G1 into S phase during mitosis, contributing to cell cycle regulation. Intriguingly, PTP4A2 emerges as a promoter of tumorigenesis, showcasing its involvement in pathological processes associated with cancer development. Additionally, PTP4A2 exhibits inhibitory effects on geranylgeranyl transferase type II activity by disrupting the association between RABGGTA and
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RABGGTB, indicating its regulatory influence on intracellular signaling pathways. The multifaceted functions of PTP4A2 underscore its significance in cellular processes related to both cell cycle dynamics and the intricate mechanisms underlying tumor progression.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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