**Anti-Phospho-Ser^{459} Protein Tyrosine Phosphatase H1 (PTPH1) Antibody**

**Catalog #:** p207-459  **Size:** 100 µl

**Cite this Antibody:** PhosphoSolutions Cat# p207-459, RRID:AB_2492219

<table>
<thead>
<tr>
<th>Host</th>
<th>Applications</th>
<th>Species Tested</th>
<th>Species Reactivity*</th>
<th>Molecular Weight</th>
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<tr>
<td>Rabbit</td>
<td>WB 1:1000</td>
<td>H, M</td>
<td>B, C, NHP, S</td>
<td>~104 kDa</td>
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</table>

**Product Description:** Affinity purified rabbit polyclonal antibody.

**Biological Significance:** Protein-tyrosine Phosphatase H1 (PTPH1) has recently been identified as a specific p38γ MAPK phosphatase which is mediated through PDZ interaction (Hou et al., 2010). Ras has been demonstrated to increase both p38γ and PTPH1 protein expression, and there is a coupling of increased p38γ and PTPH1 protein expression in primary colon cancer tissues (Hou et al., 2010). Phosphorylation of PTPH1 at Ser459 leads to PTPH1 stabilization, which plays an important role in Ras oncogenesis and stress response (Hou et al., 2012). Additionally, phosphorylation of PTPH1 Ser459 reveals a novel mechanism by which MAPK signals through PTPH1 to regulate cellular response (Hou et al., 2012).

**Antigen:** Phosphopeptide corresponding to amino acid residues surrounding the phospho-Ser^{459} of human PTPH1.

**Antibody Specificity:** Specific for endogenous levels of the ~104 kDa PTPH1 protein phosphorylated at Ser^{459}. The immunolabeling is completely eliminated by treatment with λ-phosphatase.

**Purification Method:** Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns.

**Quality Control Tests:** Western blots performed on each lot.

**Packaging:** 100 µl in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg BSA per ml and 50% glycerol.

**Storage and Stability:** Shipped on blue ice. Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.

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**Application Key:** WB = Western Blot  IF = Immunofluorescence  IHC = Immunohistochemistry  IP = Immunoprecipitation

**Species Reactivity Key:** All-All Species  A-Avian  Amp-Amphibian  Ar-Arabidopsis  B-Bovine  C-Canine  Ch-Chicken  D-Drosophila  G-Goat  GP-Guinea Pig  H-Human  Ha-Hamster  M-Mouse  NHP-Non-human primate  P-Pig  R-Rat  S-Sheep  X-Xenopus  Z-Zebrafish

*Species assumed based on 100% homology with sequence used as antigen  For Research Use Only
Product Specific References:


General References: