

## Product datasheet for **AP15235PU-N**

### PTPH1 (PTPN3) (Center) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	ELISA: 1/1,000. Western blotting: 1/100 - 1/500. Immunohistochemistry: 1/10 - 1/50.
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the center region of human PTPH1.
Specificity:	This antibody reacts to PTPH1.
Formulation:	PBS with 0.09% (W/V) sodium azide State: Purified State: Liquid purified Ig
Concentration:	lot specific
Purification:	Protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	protein tyrosine phosphatase, non-receptor type 3
Database Link:	<a href="#">Entrez Gene 5774 Human P26045</a>



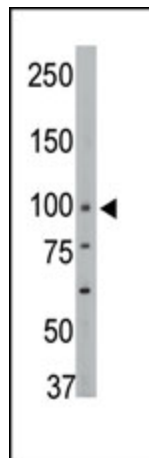
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**Background:**

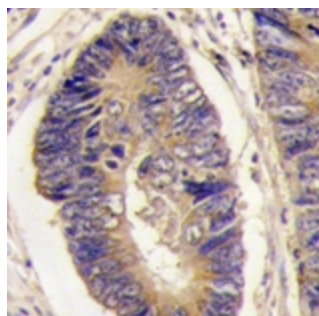
Phosphorylation of receptors by protein kinases is a process that can be reversed by a group of enzymes called protein phosphatases. Coordinated control of kinases and phosphatases provides the cell with the capacity to rapidly switch between phosphorylated and dephosphorylated protein states in dynamic response to environmental stimuli. Activation of critical enzymes by kinase phosphorylation alone is not enough to provide adequate regulation ? it is the combination with phosphatase dephosphorylation that effectively creates on/off switches to control cellular events. Errors in control, either through kinases or their counterpart phosphatases, can lead to unchecked cell growth attributable to human cancers and developmental disorders. Potential mechanisms to control dephosphorylation include changes in the expression of protein phosphatases, their subcellular localization, phosphorylation of phosphatase catalytic and regulatory subunits and regulation by endogenous phosphatase inhibitors. Most protein phosphatases are not stringently specific for their substrates. Consequently, changes in phosphatase activity may have a broad impact on dephosphorylation and turnover of phosphoproteins that are substrates for different kinases. This may be an important point of control to connect cellular circuitry of interrelated signaling pathways, and to synchronize physiological responses.

**Synonyms:**

Protein-tyrosine phosphatase H1, PTP-H1

**Product images:**

The anti-PTPH1 Center Pab is used in Western blot to detect PTPH1 in mouse brain tissue lysate.



Formalin-fixed and paraffin-embedded human colon carcinoma tissue reacted with PTPH1 antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining