# Protein-tyrosine phosphatase, Antibody

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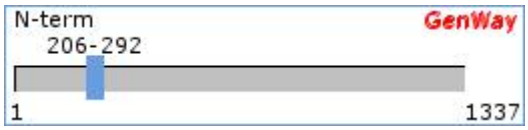
| **Catalog Number: 15-288-21475** | |
| SwissProt Accession #: Q9UDA9 | Q9UDA9_HUMAN |
| NCBI Accession #: NP_002834.2 | GI #: 18860900 |
| Immunogen Sequence Position: 206-292 | Length (aa): 1337 |
| Mol. Weight (Da): 14337 | |



Linear Protein Map with Immunogenic Epitope Marked
(sequence source from above GI#)

**Source:** Chicken

**Purity:** Immunoaffinity Purified

**Clonality:** Polyclonal

**Crossreactivity:** Human

**Format:** Phosphate-Buffered Saline. No preservatives added.

**Storage:** 4ºC for short term (weeks) and -20ºC for long term. Avoid frequent freeze and thaw.

**Stability:** 6-12 months at -20ºC.

**Shipping:** Products may be shipped on ice pack.

**Precautions:** This product is for *in vitro* research use only. Not for use in diagnostic or therapeutic procedures.

**Important Notes:** During shipment, small volumes of product will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µL or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container s cap.

## APPLICATIONS:

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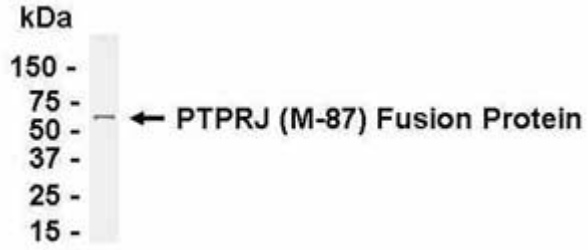
| Western Blot | Tested |
| ELISA, ICC, IHC | Not Tested |

## TESTING: (secondary reagents and protocols)

**Western Blot:** E coli-derived fusion protein as test antigen. Affinity-purified IgY dilution: 1:2000, Goat anti-IgY-HRP dilution: 1:1000. Colorimetric method for signal development.



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## TARGET DESCRIPTION:

The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP possesses an extracellular region containing five fibronectin type III repeats, a single transmembrane region, and a single intracytoplasmic catalytic domain, and thus represents a receptor-type PTP. This PTP is present in all hematopoietic lineages, and was shown to negatively regulate T cell receptor signaling possibly through interfering with the phosphorylation of Phospholipase C Gamma 1 (PLCG1) and Linker for Activation of T Cells (LAT). This PTP was also found to dephosphorylate PDGF beta receptor, and may be involved in UV-induced signal transduction.

OMIM: NCBI [600925]

## CATEGORIES RELATED TO TARGET PROTEIN:

**TISSUES:** Leukocyte, Lymphocytes, Tumor Cells, T-Cell, Intracellular, Hematopoietic, Cell Surface, Fibroblast, Blood Vessels, Colon, Peripheral Blood T-Cell, Peripheral Blood Lymphocytes, B-Cell, Thyroid, Extracellular Region, Hematopoietic Stem Cells, Colorectal Carcinoma, Colon Cancer, Granulocyte, Mammary Tumor

more... Plasma Membrane, Capillary Endothelium, Cytoplasm, Lymphoid, Colon Tumor, Thyroid Tumor, Thyroid Carcinoma, Tonsil, Vascular Smooth Muscle, Urinary Tract, Chromosomes, Embryonic Kidney, Pharynx, Monocytes, Platelet

**PROTEIN FUNCTIONS:** Esterases, Tyrosine Metabolism, Antigens, Surface, Antigens, Differentiation, Phosphotransferases, Cell Division, Immunoglobulins, Receptors, Immunologic, Serum Globulins, Membrane Glycoproteins, Receptors, Peptide, Cell Adhesion Molecules (Cams), Phosphatidylinositolg Signaling System, Cytokines, Oncogene Proteins, Peptide Hormones, Mitogen-Activated Protein Kinases, Cytokine Receptors, Ephrins, Receptors, Cytokine

more...

**DISEASES:** Benign Tumor, Breast Tumor, Breast Cancer, Colorectal Tumor, Colorectal Cancer, Thyroid Cancer, Neck Cancer, Leukemia, Escherichia Coli, Adenocarcinoma, Breast Carcinoma

## BACKGROUND REFERENCES:

**[1]** Lesueur,F., et al. Allelic association of the human homolog...
**[2]** Iuliano,R., et al. The tyrosine phosphatase PTPRJ/DEP-1 gen...
**[3]** Massa,A., et al. The expression of the phosphotyrosine ph...
**[4]** Kellie,S., et al. The tyrosine phosphatase DEP-1 induces c...
**[5]** Holsinger,L.J., et al. The transmembrane receptor protein tyros...