

**PTPRD Antibody**  
Catalog # ASC11490

**Specification**

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**PTPRD Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P23468</a>
Other Accession	<a href="#">NP_569075</a> , <a href="#">289547551</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>IgG</b>
Calculated MW	<b>Predicted: 165, 210 kDa (130 kDa for cleavage product)</b>
Application Notes	<b>Observed: 130 kDa KDa</b> <b>PTPRD antibody can be used for detection of PTPRD by Western blot at 1 - 2 µg/mL.</b>

**PTPRD Antibody - Additional Information**

Gene ID **5789**

**Target/Specificity**

PTPRD; PTPRD antibody is human specific. At least three alternatively spliced transcript variants encoding distinct isoforms have been observed. PTPRD cleavage products are often observed in vivo

**Reconstitution & Storage**

PTPRD antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

PTPRD Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**PTPRD Antibody - Protein Information**

**Name** PTPRD

**Function**

Can bidirectionally induce pre- and post-synaptic differentiation of neurons by mediating interaction with IL1RAP and IL1RAPL1 trans-synaptically. Involved in pre-synaptic differentiation through interaction with SLITRK2.

**Cellular Location**

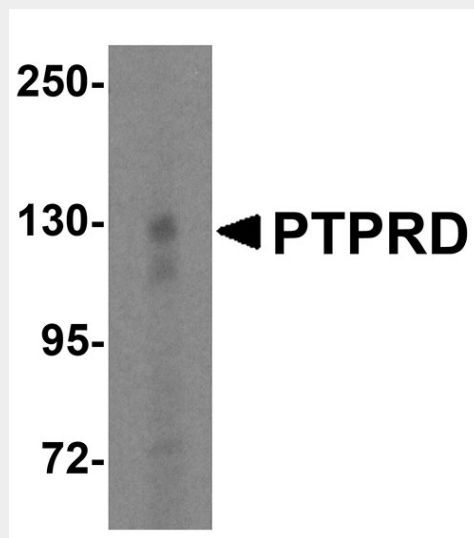
Membrane; Single-pass type I membrane protein.

## PTPRD Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## PTPRD Antibody - Images



Western blot analysis of PTPRD in HeLa cell lysate with PTPRD antibody at 1  $\mu$ g/mL.

## PTPRD Antibody - Background

**PTPRD Antibody:** PTPRD (Protein tyrosine phosphatase receptor type D) is a member of the protein tyrosine phosphatase (PTP) family that plays diverse roles during development including cell growth, differentiation, mitotic cycle and oncogenic transformation. PTPRD contains an extracellular region, a single transmembrane segment and two tandem intracytoplasmic catalytic domains. The extracellular region of PTPRD is composed of three Ig-like and eight fibronectin type III-like domains (1,3). PTPRD interacts with PPFIA1-3 and is a tumor suppressor on chromosome 9p that is involved in the development of glioblastoma multiforme (GBMs) and multiple human cancers.

## PTPRD Antibody - References

- Krueger NX, Streuli M, and Saito H. Structural diversity and evolution of human receptor-like protein tyrosine phosphatases. *EMBO J.* 1990; 9:3241-52.
- Fischer EH, Charbonneau H and Tonks NK. Protein tyrosine phosphatases: a diverse family of intracellular and transmembrane enzymes. *Science* 1991; 253:401-6.
- Pan MG, Rim C, Lu KP et al. Cloning and expression of two structurally distinct receptor-linked protein-tyrosine phosphatases generated by RNA processing from a single gene. *J. Biol. Chem.* 1993; 268:19284-91.
- Veeriah S, Brennan C, Meng S, et al. The tyrosine phosphatase PTPRD is a tumor suppressor that is frequently inactivated and mutated in glioblastoma and other human cancers. *Proc. Natl. Acad. Sci.*

USA 2009; 106: 9435-40.