

PTPRD Antibody
Catalog # ASC11490**Specification**

PTPRD Antibody - Product Information

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

PTPRD Antibody - Additional InformationGene 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

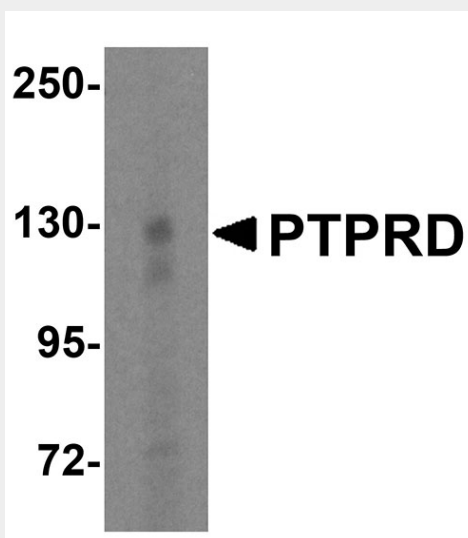
Membrane; Single-pass type I membrane protein.

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 µg/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.