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PTPRD Antibody

Catalog # ASC11490

Product Information

Application	WB, E
Primary Accession	P23468
Other Accession	NP_569075, 289547551
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	214760
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	PTPRD antibody can be used for detection of PTPRD by Western blot at 1 - 2 g/mL.

Additional Information

Gene ID	5789
Other Names	Receptor-type tyrosine-protein phosphatase delta, Protein-tyrosine phosphatase delta, R-PTP-delta, 3.1.3.48, PTPRD
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℃ for three months and -20℃, 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.

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.

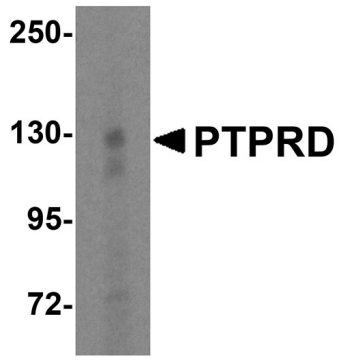
Background

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.

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.

Images



Western blot analysis of PTPRD in HeLa cell lysate with PTPRD antibody at 1 µg/mL.