

# PTPRD Polyclonal antibody

Catalog Number: 27941-1-AP

## Basic Information

Catalog Number:

27941-1-AP

Concentration:

550 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG27689

GenBank Accession Number:

BC106714

GeneID (NCBI):

5789

UNIPROT ID:

P23468

Full Name:

protein tyrosine phosphatase,  
receptor type, D

Calculated MW:

1912 aa, 215 kDa

Observed MW:

75 kDa, 175 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:5000

IHC 1:50-1:500

## Applications

Tested Applications:

WB, IHC, ELISA

Species Specificity:

human, mouse, rat

**Note-IHC: suggested antigen retrieval with  
TE buffer pH 9.0; (\*) Alternatively, antigen  
retrieval may be performed with citrate  
buffer pH 6.0**

Positive Controls:

WB : HuH-7 cells, human placenta tissue, mouse liver  
tissue, rat liver tissue

IHC : human liver tissue,

## Background Information

PTPRD is a receptor-type protein tyrosine phosphatase that plays significant roles in various biological processes, including cell adhesion, synaptic function, and signal transduction. PTPRD is highly expressed in the brain, followed by the kidney, ovary, placenta, and intestine. Within the brain, it is found in specific regions, suggesting a role in neurological functions. PTPRD has emerged as a potential therapeutic target for various brain phenotypes and disorders. Its genetic variations have been associated with nervous system phenotypes, and the discovery of the first small molecule inhibitor of PTPRD phosphatase has opened new avenues for therapeutic intervention in addiction and possibly other PTPRD-associated disorders. Additionally, PTPRD is considered a tumor-suppressor gene that is down-regulated in hepatocellular carcinoma, suggesting its role in cancer progression and potential as a therapeutic target. The protein can recognize 175 kDa full length and 75 kDa mature cleavage product (PMID: 19074898, PMID: 25113440).

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

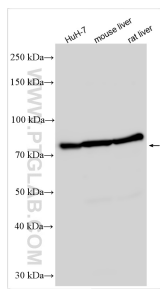
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

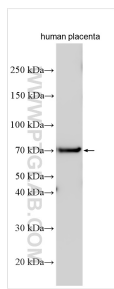
W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

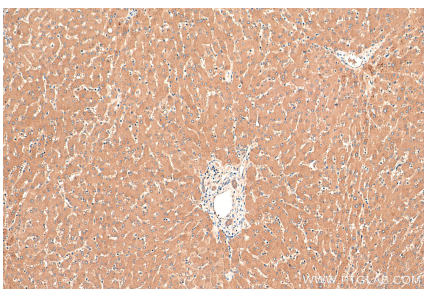
## Selected Validation Data



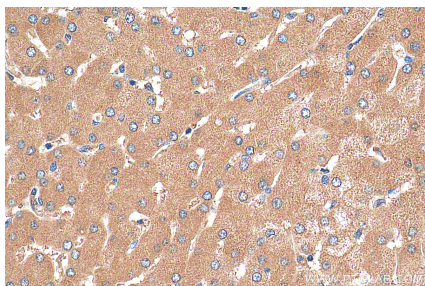
Various lysates were subjected to SDS PAGE followed by western blot with 27941-1-AP (PTPRD antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 27941-1-AP (PTPRD antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 27941-1-AP (PTPRD antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 27941-1-AP (PTPRD antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).