

For Research Use Only

# PTPRF Recombinant monoclonal antibody, PBS Only (Capture)

Catalog Number: 86944-1-PBS



## Basic Information

<b>Catalog Number:</b> 86944-1-PBS	<b>GenBank Accession Number:</b> NM_002840.4	<b>Purification Method:</b> Protein A purification
<b>Source:</b> Rabbit	<b>GeneID (NCBI):</b> 5792	<b>CloneNo.:</b> 252028F8
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> P10586-1	
<b>Immunogen Catalog Number:</b> EG6919	<b>Full Name:</b> protein tyrosine phosphatase, receptor type, F	
	<b>Calculated MW:</b> 213 kDa	
	<b>Observed MW:</b> 150 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, Cytometric bead array, Sandwich ELISA, Indirect ELISA

**Species Specificity:**  
human, mouse, rat

## Background Information

PTPRF (Protein Tyrosine Phosphatase Receptor Type F) is a receptor protein tyrosine phosphatase, also known as LAR. PTPRF is a transmembrane protein with extracellular domain, transmembrane domain and two intracellular catalytic domains in series. It is located in the cell membrane and participates in the interaction between cells or cell matrix. It is widely expressed in many tissues, including fat, skin, heart, lung, liver, kidney, pancreas, small intestine, colon, brain, skeletal muscle, spleen, peripheral white blood cells and so on. The protein plays an important role in regulating a variety of cell processes, including cell growth, differentiation, mitotic cycle and carcinogenic transformation. In the insulin-responsive tissues of obese and insulin-resistant individuals, the expression level of PTPRF is increased, which may contribute to the pathogenesis of insulin resistance. PTPRF showed expression changes in many cancers, such as breast cancer, thyroid cancer, non-small cell lung cancer and so on. In gastric adenocarcinoma, PTPRF, as a new tumor suppressor, plays a role by inactivating ERK1/2 signaling pathway (PMID: 32973331). The total length of the protein is 175-200kd, and after cutting, it forms 125-150 and 80-85kd, 70 and 72kDa fragments (PMID: 1547787, PMID: 17259169).

## Storage

**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS only, pH7.3

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

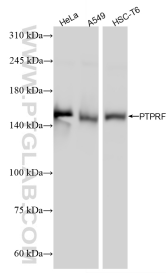
T: 4006900926

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

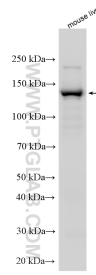
W: [ptgcn.com](http://ptgcn.com)

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

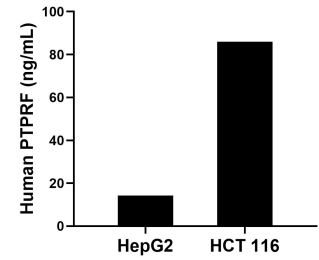
## Selected Validation Data



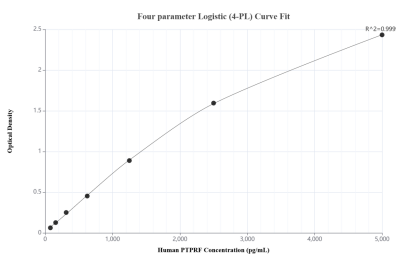
Various lysates were subjected to SDS PAGE followed by western blot with 86944-1-RR (PTPRF antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86944-1-PBS in a different storage buffer formulation.



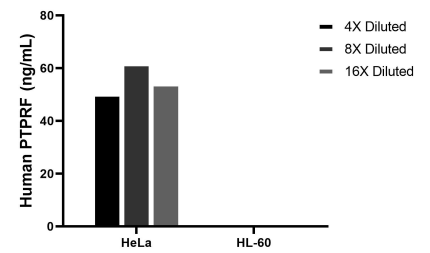
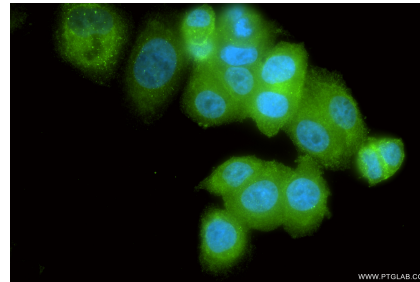
Various lysates were subjected to SDS PAGE followed by western blot with 86944-1-RR (PTPRF antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86944-1-PBS in a different storage buffer formulation.



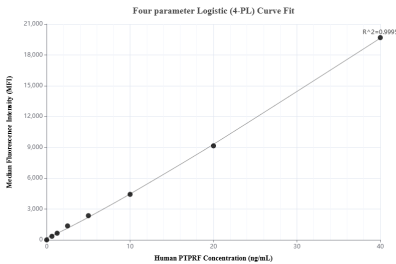
The mean PTPRF concentration was determined to be 14.2 ng/mL in HepG2 cell extract based on a 1.2 mg/mL extract load and 85.9 ng/mL in HCT 116 cell extract based on a 1.3 mg/mL extract load.



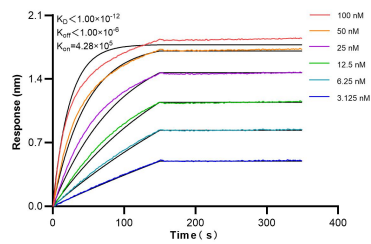
Sandwich ELISA standard curve of MP02791-1, Human PTPRF Recombinant Matched Antibody Pair - PBS only. 86944-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg6919. 86944-2-PBS was HRP conjugated as the detection antibody. Range: 78.1-5000 pg/mL.



The mean PTPRF concentration was determined to be 55.3 ng/mL in HeLa cell extract based on a 1.2 mg/mL extract load, HL-60 cell extract were served as a negative control.



Cytometric bead array standard curve of MP02791-1, PTPRF Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 86944-1-PBS. Detection antibody: 86944-2-PBS. Standard: Eg6919. Range: 0.625-40 ng/mL.



Biolayer interferometry (BLI) kinetic assays of 86944-1-RR against Human PTPRF were performed. The affinity constant is below 1 pM.