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**Product Name: KD-Validated PTBP1 Recombinant Rabbit Monoclonal Antibody****Catalog #: KOVAb00948**

For research use only.

**Summary**

<b>Description</b>	KD-Validated antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,FCM,ICC,IHC-P
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Rabbit mAb
<b>Form</b>	Liquid
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
<b>Molecular Weight</b>	Calculated MW: 57.2kDa

**Antigen Information**

<b>Gene Name</b>	PTBP1 Polypyrimidine Tract Binding Protein 1; Heterogeneous Nuclear Ribonucleoprotein I; HNRNP-I; HNRPI; PTB-1; PTB2; PTB3; PTB4; PPTB; PTB; Polypyrimidine Tract Binding Protein
<b>Alternative Names</b>	(Heterogeneous Nuclear Ribonucleoprotein I); Polypyrimidine Tract-Binding Protein 1; 57 KDa RNA-Binding Protein PPTB-1; HnRNP I; Heterogeneous Nuclear Ribonucleoprotein Polypeptide I; RNA-Binding Protein; HNRNPI; PTB-T
<b>Gene ID</b>	5725.0
<b>SwissProt ID</b>	P26599
<b>Immunogen</b>	A synthesized peptide derived from human PTBP1

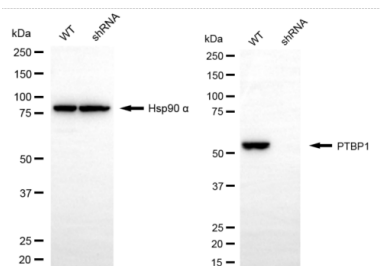
**Background**

This gene belongs to the subfamily of ubiquitously expressed heterogeneous nuclear ribonucleoproteins (hnRNPs). The hnRNPs are RNA-binding proteins and they complex with heterogeneous nuclear RNA (hnRNA). These proteins are associated with pre-mRNAs in the nucleus and appear to influence pre-mRNA processing and other aspects of mRNA metabolism and transport. While all of the hnRNPs are present in the nucleus, some seem to shuttle between the nucleus and the cytoplasm. The hnRNP proteins have distinct nucleic acid binding properties. The protein encoded by this gene has four repeats of quasi-RNA recognition motif (RRM) domains that bind RNAs. This protein binds to the intronic polypyrimidine tracts that requires pre-mRNA splicing and acts via the protein degradation ubiquitin-proteasome pathway. It may also promote the binding of U2 snRNP to pre-mRNAs. This protein is localized in the nucleoplasm and it is also detected in the perinucleolar structure. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2008]

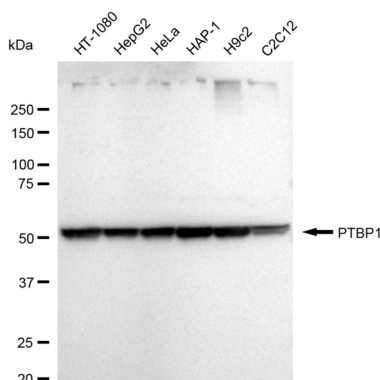
## Research Area

Epigenetics and Nuclear Signaling

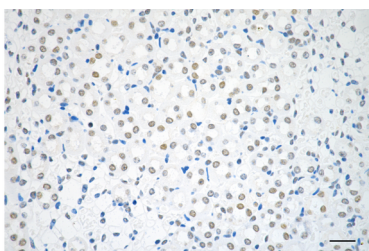
## Image Data



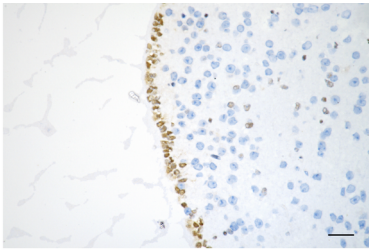
Western blotting analysis using PTBP1 antibody (KOVAb00948). PTBP1 expression in wild-type (WT) and PTBP1 shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with PTBP1 antibody (KOVAb00948, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



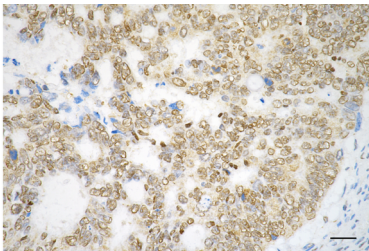
Western blotting analysis using PTBP1 antibody (KOVAb00948). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with PTBP1 antibody (KOVAb00948, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



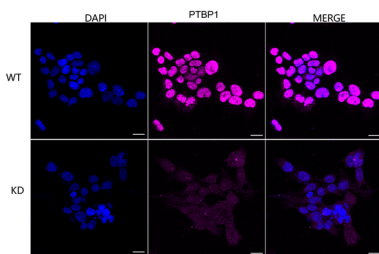
Immunohistochemistry was performed on paraffin-embedded mouse kidney using PTBP1 antibody (KOVAb00948, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40 $\times$  objective). Scale bar: 25  $\mu$ m.



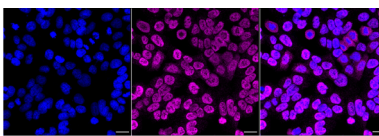
Immunohistochemistry was performed on paraffin-embedded mouse brain using PTBP1 antibody (KOVA00948, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 μm.



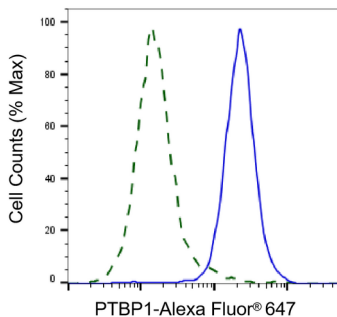
Immunohistochemistry was performed on paraffin-embedded mouse liver using PTBP1 antibody (KOVA00948, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 μm.



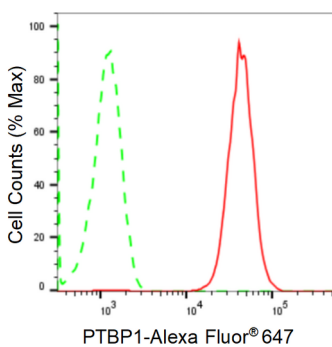
Immunocytochemical staining of HeLa cells using PTBP1 antibody (KOVA00948, 1:1,000), Top panel: wild-type (WT); Bottom panel: PTBP1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; PTBP1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 μm. Permeabilization: Triton.



Immunocytochemical staining of HAP-1 cells with PTBP1 antibody (KOVA00948, 1:1,000). Nuclei were stained blue with DAPI; PTBP1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μm.



Validation of PTBP1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with PTBP1 antibody (KOVA00948, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of PTBP1 expression in HAP-1 cells using PTBP1 antibody (KOVA00948, 1:2,000). Green, isotype control; red, PTBP1.