

Basic Information

Product Name	Anti-PTBP1 Antibody	
Gene Name	PTBP1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human PTBP1 recombinant protein (Position: M1-A504).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	57 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

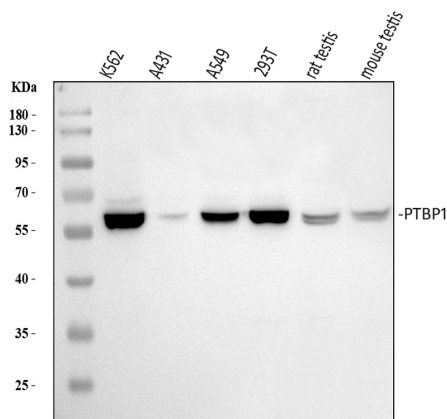
Polypyrimidine tract-binding protein 1 is a protein that in humans is encoded by the PTBP1 gene. It is mapped to 19p13.3. This gene belongs to the subfamily of ubiquitously expressed heterogeneous nuclear ribonucleoproteins (hnRNPs). The hnRNPs are RNA-binding proteins and they complex with heterogeneous 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.

Reference

Anti-PTBP1 Antibody被引用在1文献中。

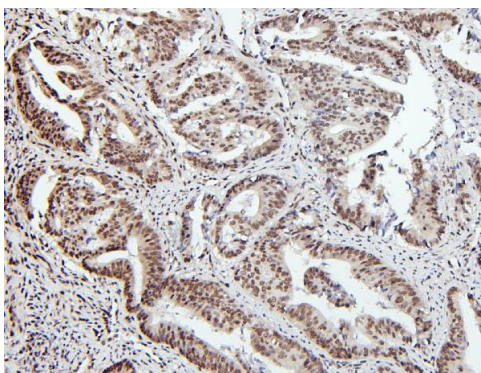
Selected Validation Data



Western blot analysis of PTBP1 using anti-PTBP1 antibody (A01798). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

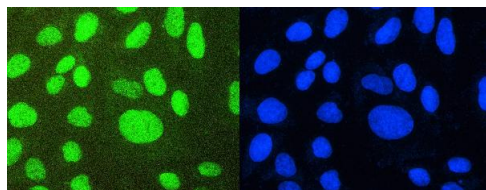
Lane 1: human K562 whole cell lysates,
Lane 2: human A431 whole cell lysates,
Lane 3: human A549 whole cell lysates,
Lane 4: human 293T whole cell lysates,
Lane 5: rat testis tissue lysates,
Lane 6: mouse testis tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-PTBP1 antigen affinity purified polyclonal antibody (A01798) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for PTBP1 at approximately 57 kDa. The expected band size for PTBP1 is at 57 kDa.



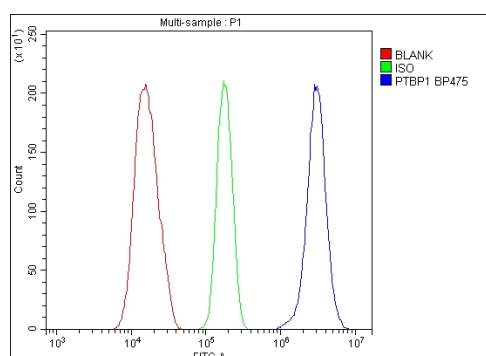
IHC analysis of PTBP1 using anti-PTBP1 antibody (A01798).

PTBP1 was detected in a paraffin-embedded section of human colon cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-PTBP1 Antibody (A01798) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of PTBP1 using anti- PTBP1 antibody (A01798).

PTBP1 was detected in immunocytochemical section of U2OS cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) rabbit anti- PTBP1 Antibody (A01798) . DyLight488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of 293T cells using anti-PTBP1 antibody (A01798).

Overlay histogram showing 293T cells stained with A01798 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PTBP1 Antibody (A01798) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.