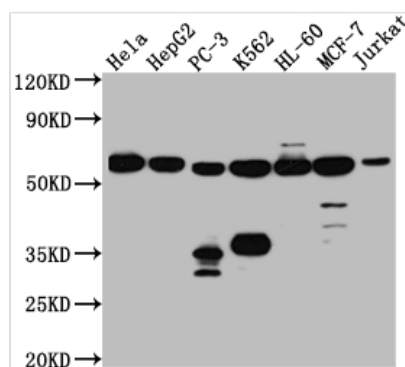




PTBP1 Recombinant Monoclonal Antibody

Product Code	CSB-RA987652A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P26599
Immunogen	A synthesized peptide derived from human PTBP1
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	Plays a role in pre-mRNA splicing and in the regulation of alternative splicing events. Activates exon skipping of its own pre-mRNA during muscle cell differentiation. Binds to the polypyrimidine tract of introns. May promote RNA looping when bound to two separate polypyrimidine tracts in the same pre-mRNA. May promote the binding of U2 snRNP to pre-mRNA. Cooperates with RAVER1 to modulate switching between mutually exclusive exons during maturation of the TPM1 pre-mRNA. Represses the splicing of MAPT/Tau exon 10 (PubMed:15009664). In case of infection by picornaviruses, binds to the viral internal ribosome entry site (IRES) and stimulates the IRES-mediated translation (PubMed:21518806).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling
Gene Names	PTBP1
Clone No.	8A1

Image

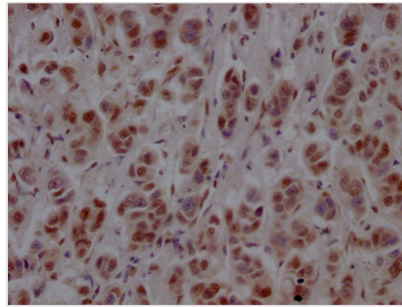


Western Blot

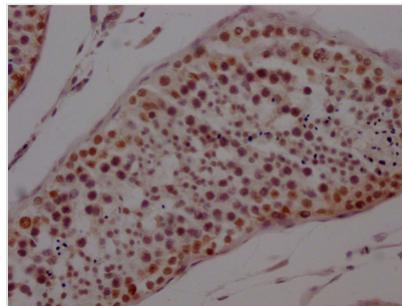
Positive WB detected in: Hela whole cell lysate, HepG2 whole cell lysate, PC-3 whole cell lysate, K562 whole cell lysate, HL-60 whole cell lysate, MCF-7 whole cell lysate, Jurkat whole cell lysate
All lanes: PTBP1 antibody at 1:1000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 58, 60, 60 kDa
Observed band size: 58 kDa



IHC image of CSB-RA987652A0HU diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA987652A0HU diluted at 1:100 and staining in paraffin-embedded human testis tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The generation of a PTBP1 recombinant antibody consists of four essential steps. Firstly, the PTBP1 monoclonal antibody gene is sequenced. Secondly, the gene is cloned into a plasmid vector. Thirdly, the recombinant vector is introduced into a host cell line. Fourthly, the PTBP1 recombinant monoclonal antibody is purified from the cell culture supernatant using affinity chromatography. The PTBP1 monoclonal antibody is derived from the PTBP1 antibody-producing hybridomas, and a synthesized peptide derived from human PTBP1 is used as the immunogen during PTBP1 monoclonal antibody production. The PTBP1 recombinant monoclonal antibody can be used in ELISA, WB, and IHC applications to detect human PTBP1 protein.

The PTBP1 protein plays a role in the regulation of alternative splicing of pre-mRNAs. It binds to pyrimidine-rich sequences in the pre-mRNA and controls the selection of splice sites. PTBP1 has also been implicated in mRNA stabilization, mRNA localization, and translational control. Additionally, PTBP1 has been shown to interact with other proteins and RNA molecules to regulate various cellular processes, including cell proliferation and differentiation, apoptosis, and synaptic plasticity.