

ARG42836
anti-PTBP1 / PTB antibody [3H12]Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [3H12] recognizes PTBP1 / PTB
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	3H12
Isotype	IgG2b
Target Name	PTBP1 / PTB
Species	Human
Immunogen	Recombinant protein corresponding to M1-A504 of Human PTBP1 / PTB.
Conjugation	Un-conjugated
Alternate Names	PTB-1; PTB-T; HNRPI; PTB; PTB3; HNRNPI; Heterogeneous nuclear ribonucleoprotein I; hnRNP I; HNRNP-I; Polypyrimidine tract-binding protein 1; PTB4; PTB2; pPTB; 57 kDa RNA-binding protein PPTB-1

Application Instructions

Application table	Application	Dilution
	FACS	1:150 - 1:500
	ICC/IF	1:200 - 1:1000
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	57 kDa	

Properties

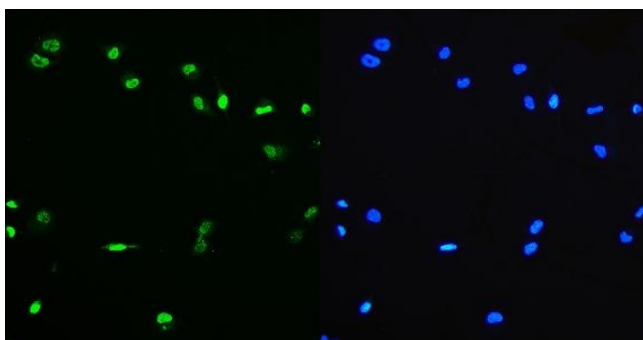
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose

Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

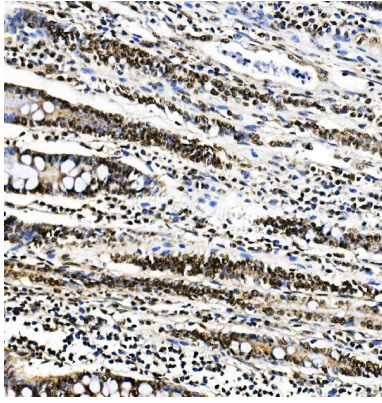
Gene Symbol	PTBP1
Gene Full Name	polypyrimidine tract binding protein 1
Background	This gene belongs to the subfamily of ubiquitously expressed heterogeneous nuclear ribonucleoproteins (hnRNPs). The hnRNPs are RNA-binding proteins and they complex with heterogeneous nuclear RNA (hnRNA). These proteins 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]
Function	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). [UniProt]
Calculated Mw	57 kDa
Cellular Localization	Nucleus. [UniProt]

Images



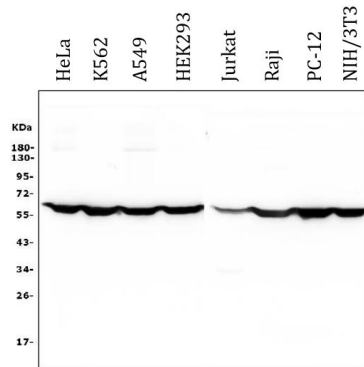
ARG42836 anti-PTBP1 / PTB antibody [3H12] ICC/IF image

Immunofluorescence: HeLa cells were blocked with 10% goat serum and then stained with ARG42836 anti-PTBP1 / PTB antibody [3H12] (green) at 2 µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



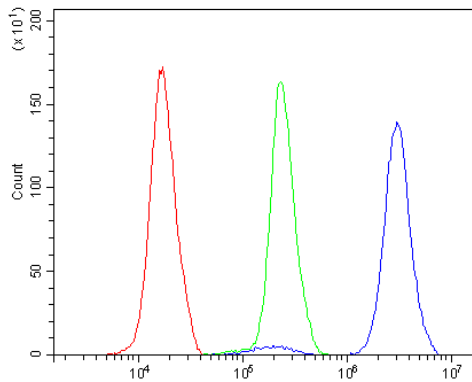
ARG42836 anti-PTBP1 / PTB antibody [3H12] IHC-P image

Immunohistochemistry: Paraffin-embedded Human rectal cancer tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42836 anti-PTBP1 / PTB antibody [3H12] at 1 µg/ml dilution, overnight at 4°C.



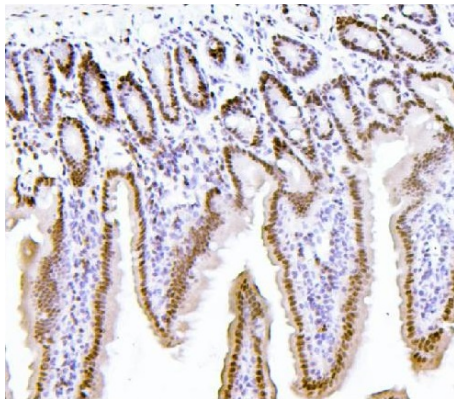
ARG42836 anti-PTBP1 / PTB antibody [3H12] WB image

Western blot: 50 µg of sample under reducing conditions. HeLa, K562, A549, HEK293, Jurkat, Raji, PC-12 and NIH/3T3 whole cell lysates stained with ARG42836 anti-PTBP1 / PTB antibody [3H12] at 0.5 µg/ml dilution, overnight at 4°C.



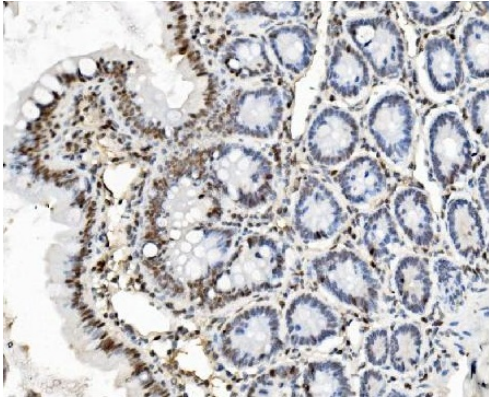
ARG42836 anti-PTBP1 / PTB antibody [3H12] FACS image

Flow Cytometry: K562 cells were blocked with 10% normal goat serum and then stained with ARG42836 anti-PTBP1 / PTB antibody [3H12] (blue) at 1 µg/10⁶ cells for 30 min at 20°C, followed by incubation with DyLight[®]488 labelled secondary antibody. Isotype control antibody (green) was Mouse IgG (1 µg/10⁶ cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



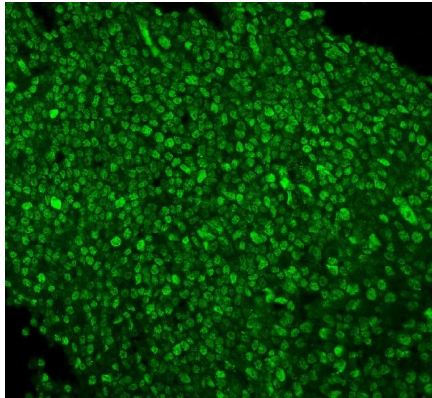
ARG42836 anti-PTBP1 / PTB antibody [3H12] IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse intestine tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42836 anti-PTBP1 / PTB antibody [3H12] at 1 µg/ml dilution, overnight at 4°C.



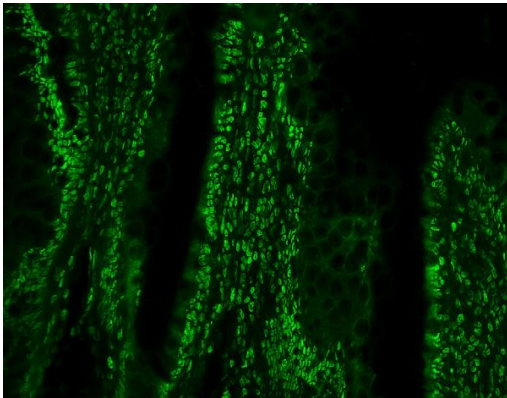
ARG42836 anti-PTBP1 / PTB antibody [3H12] IHC-P image

Immunohistochemistry: Paraffin-embedded Rat intestine tissue.
Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42836 anti-PTBP1 / PTB antibody [3H12] at 1 µg/ml dilution, overnight at 4°C.



ARG42836 anti-PTBP1 / PTB antibody [3H12] IHC-P image

Immunohistochemistry: Paraffin-embedded Human tonsil tissue.
Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42836 anti-PTBP1 / PTB antibody [3H12] at 2 µg/ml dilution, overnight at 4°C.



ARG42836 anti-PTBP1 / PTB antibody [3H12] IHC-P image

Immunohistochemistry: Paraffin-embedded Rat intestine tissue.
Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42836 anti-PTBP1 / PTB antibody [3H12] at 2 µg/ml dilution, overnight at 4°C.
