10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-PTBP2 Picoband™ Antibody (monoclonal, 13D11)

Catalog # ABO15017

Specification

Anti-PTBP2 Picoband™ Antibody (monoclonal, 13D11) - Product Information

Application	**WB, IHC, IF, ICC, FC**
Primary Accession	Q9UKA9
Host	**Mouse**
Isotype	**Mouse IgG2a**
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Anti-PTBP2 Picoband™ Antibody (monoclonal, 13D11) . Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-PTBP2 Picoband™ Antibody (monoclonal, 13D11) - Additional Information

Gene ID 58155

Other Names
Polypyrimidine tract-binding protein 2, Neural polypyrimidine tract-binding protein, Neurally-enriched homolog of PTB, PTB-like protein, PTBP2 (HGNC:17662), NPTB, PTB, PTBLP

Calculated MW
57-60 kDa KDa

Application Details
Western blot, 0.25-0.5 µg/ml, Human, Mouse, Rat
 Immunohistochemistry (Paraffin-embedded Section), 2-5 µg/ml, Human, Mouse, Rat
 Immunocytochemistry/Immunofluorescence, 5 µg/ml, Human
 Flow Cytometry, 1-3 µg/1x10^6 cells, Human

Contents
Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.

Immunogen
E.coli-derived human PTBP2 recombinant protein (Position: M1-A504).

Purification
Immunogen affinity purified.

Storage	**Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored**

frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.

Anti-PTBP2 Picoband™ Antibody (monoclonal, 13D11) - Protein Information

Name PTBP2 (HGNC:17662)

Synonyms NPTB, PTB, PTBLP

Function
RNA-binding protein which binds to intronic polypyrimidine tracts and mediates negative regulation of exons splicing. May antagonize in a tissue-specific manner the ability of NOVA1 to activate exon selection. In addition to its function in pre-mRNA splicing, plays also a role in the regulation of translation.

Cellular Location
Nucleus {ECO:0000250|UniProtKB:Q91Z31}.

Tissue Location
Mainly expressed in brain although also detected in other tissues like heart and skeletal muscle. Isoform 1 and isoform 2 are specifically expressed in neuronal tissues. Isoform 3 and isoform 4 are expressed in non-neuronal tissues. Isoform 5 and isoform 6 are truncated forms expressed in non-neuronal tissues

Anti-PTBP2 Picoband™ Antibody (monoclonal, 13D11) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-PTBP2 Picoband™ Antibody (monoclonal, 13D11) - Images

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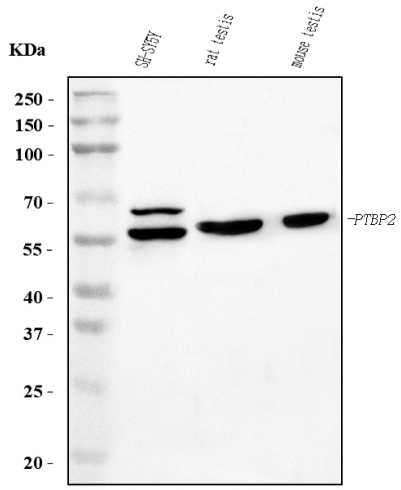

Figure 1. Western blot analysis of PTBP2 using anti-PTBP2 antibody (M05020-2).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human SH-SY5Y whole cell lysates,
Lane 2: rat testis tissue lysates,
Lane 3: mouse testis tissue lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-PTBP2 antigen affinity purified monoclonal antibody (Catalog # M05020-2) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for PTBP2 at approximately 57-60 kDa. The expected band size for PTBP2 is at 57 kDa.

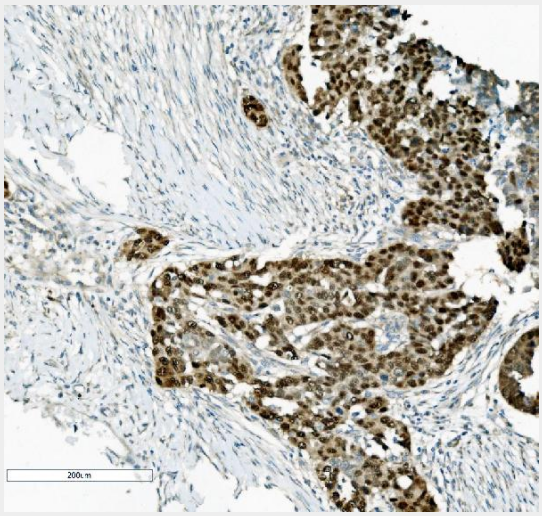

Figure 2. IHC analysis of PTBP2 using anti-PTBP2 antibody (M05020-2).
PTBP2 was detected in paraffin-embedded section of human gallbladder adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-PTBP2 Antibody (M05020-2) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the

chromogen.

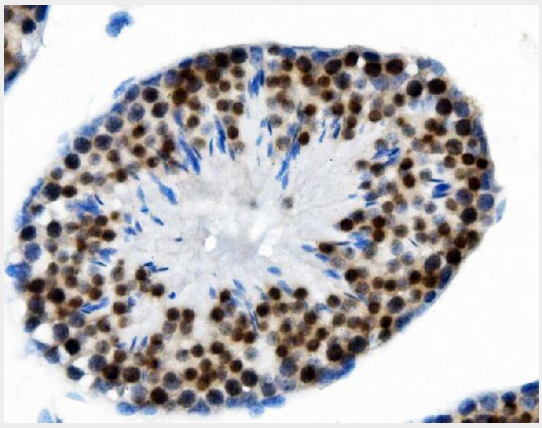

Figure 3. IHC analysis of PTBP2 using anti-PTBP2 antibody (M05020-2).
PTBP2 was detected in paraffin-embedded section of mouse testis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-PTBP2 Antibody (M05020-2) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

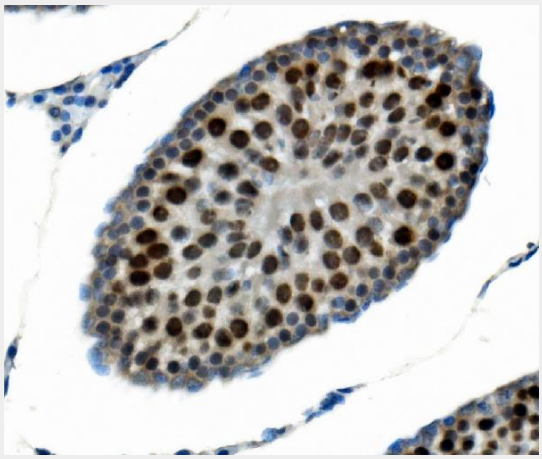

Figure 4. IHC analysis of PTBP2 using anti-PTBP2 antibody (M05020-2).
PTBP2 was detected in paraffin-embedded section of rat testis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-PTBP2 Antibody (M05020-2) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

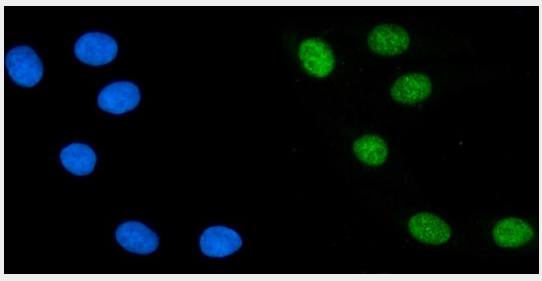

Figure 5. IF analysis of PTBP2 using anti-PTBP2 antibody (M05020-2).
PTBP2 was detected in an immunocytochemical section of U20S cells. Enzyme antigen retrieval

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was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 µg/mL mouse anti-PTBP2 Antibody (M05020-2) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

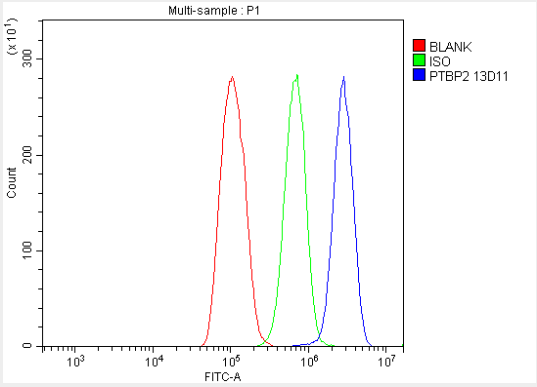

Figure 6. Flow Cytometry analysis of THP-1 cells using anti-PTBP2 antibody (M05020-2). Overlay histogram showing THP-1 cells stained with M05020-2 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-PTBP2 Antibody (M05020-2, 1 µg/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 µg/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Anti-PTBP2 Picoband™ Antibody (monoclonal, 13D11) - Background

Polypyrimidine tract binding protein 2, also known as PTBP2, is a protein which in humans is encoded by the PTBP2 gene. It is mapped to 1p21.3. The protein encoded by this gene binds to intronic polypyrimidine clusters in pre-mRNA molecules and is implicated in controlling the assembly of other splicing-regulatory proteins. This protein is very similar to the polypyrimidine tract binding protein (PTB) but most of its isoforms are expressed primarily in the brain. Alternative splicing results in multiple transcript variants.