

PTBP-2 (A-10): sc-376316

BACKGROUND

PTBP-2 (polypyrimidine tract binding protein 2), also known as PTB or nPTB (neural polypyrimidine tract-binding protein), is a member of the polypyrimidine tract binding family of proteins. Predominantly expressed in brain, but also found in heart and skeletal muscle, PTBP-2 localizes to the nucleus and contains four RRM (RNA recognition motif) domains. PTBP-2 functions as an RNA-binding protein associated in a complex that is involved in the regulation of exon splicing and the stabilization of mRNAs in the cytoplasm. Six isoforms exist for PTBP-2 due to alternative splicing events. Isoforms 1 and 2 (also known as nPTB1 and nPTB2/PTBPLP-L, respectively) are neuronal-specific. Isoforms 3 and 4 (also known as nPTB3/PTBPLP-L and nPTB4, respectively) are found in non-neuronal tissues, as are isoforms 5 and 6 (also known as nPTB5/nPTB7/PTBPLP-S and nPTB6/nPTB8/PTBPLP-S, respectively). The existence of various isoforms may function to modulate the RNA-binding properties of PTBP-2.

REFERENCES

- Markovtsov, V., et al. 2000. Cooperative assembly of an hnRNP complex induced by a tissue-specific homolog of polypyrimidine tract binding protein. *Mol. Cell. Biol.* 20: 7463-7479.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608449. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: PTBP2 (human) mapping to 1p21.3; Ptbp2 (mouse) mapping to 3 G1.

SOURCE

PTBP-2 (A-10) is a mouse monoclonal antibody raised against amino acids 138-177 mapping within an internal region of PTBP-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PTBP-2 (A-10) is available conjugated to agarose (sc-376316 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376316 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376316 PE), fluorescein (sc-376316 FITC), Alexa Fluor® 488 (sc-376316 AF488), Alexa Fluor® 546 (sc-376316 AF546), Alexa Fluor® 594 (sc-376316 AF594) or Alexa Fluor® 647 (sc-376316 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376316 AF680) or Alexa Fluor® 790 (sc-376316 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

PTBP-2 (A-10) is recommended for detection of PTBP-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PTBP-2 (A-10) is also recommended for detection of PTBP-2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for PTBP-2 siRNA (h): sc-78824, PTBP-2 siRNA (m): sc-106461, PTBP-2 shRNA Plasmid (h): sc-78824-SH, PTBP-2 shRNA Plasmid (m): sc-106461-SH, PTBP-2 shRNA (h) Lentiviral Particles: sc-78824-V and PTBP-2 shRNA (m) Lentiviral Particles: sc-106461-V.

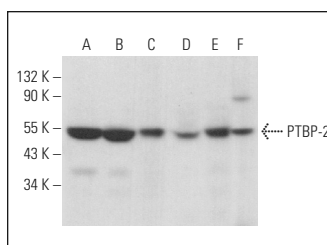
Molecular Weight of PTBP-2: 60 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, SJRH30 cell lysate: sc-2287 or MOLT-4 cell lysate: sc-2233.

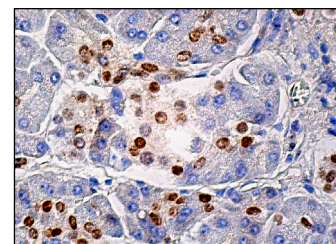
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



PTBP-2 (A-10): sc-376316. Western blot analysis of PTBP-2 expression in HeLa (A), SJRH30 (B), MOLT-4 (C), NIH/3T3 (D) and A549 (E) whole cell lysates and rat testis tissue extract (F). Detection reagent used: m-IgGκ BP-HRP: sc-516102.



PTBP-2 (A-10): sc-376316. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing nuclear staining of subset of glandular cells.

RESEARCH USE

For research use only, not for use in diagnostic procedures.