SANTA CRUZ BIOTECHNOLOGY, INC.

PAI-RBP1 (F-8): sc-376832

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

PAI-RBP1 (plasminogen activator inhibitor 1 RNA-binding protein), also known as SERBP1 (SERPINE1 mRNA-binding protein 1), CGI-55, CHD3IP (chromodomain helicase DNA binding protein 3 interacting protein), HABP4L or PAIRBP1, is a membrane-associated protein that localizes to the nucleus, the perinuclear region of the cytoplasm and the plasma membrane. PAI-RBP1 is believed to play a role in the regulation of mRNA stability, as it specifically binds to the CRS (cyclic nucleotide-responsive sequence) motif of the PAI-1 mRNA and acts to stabilize the mRNA and regulate its expression. In addition, PAI-RBP1 interacts with Mi2-α and may be involved in chromatin remodeling. PAI-RBP1 also interacts with PGRMC1 and participates in the transduction of the antiapoptotic action of progesterone in ovarian cell types. The gene encoding PAI-RBP1 is overexpressed in ovarian cancer, suggesting a possible role for PAI-RBP1 in tumorigenesis and tumor metastasis.

REFERENCES

1. Heaton, J.H., et al. 2001. Identification and cDNA cloning of a novel RNA-binding protein that interacts with the cyclic nucleotide-responsive sequence in the Type-1 plasminogen activator inhibitor mRNA. J. Biol. Chem. 276: 3341-3347.
2. Lemos, T.A., et al. 2003. Characterization of a new family of proteins that interact with the C-terminal region of the chromatin-remodeling factor CHD-3. FEBS Lett. 533: 14-20.
3. Peluso, J.J., et al. 2005. Expression and function of PAIRBP1 within gonadotropin-primed immature rat ovaries: PAIRBP1 regulation of granulosa and luteal cell viability. Biol. Reprod. 73: 261-270.

CHROMOSOMAL LOCATION

Genetic locus: SERBP1 (human) mapping to 1p31.3; Serbp1 (mouse) mapping to 6 C1.

SOURCE

PAI-RBP1 (F-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 139-173 within an internal region of PAI-RBP1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PAI-RBP1 (F-8) is available conjugated to agarose (sc-376832 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-376832 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376832 PE), fluorescein (sc-376832 FITC), Alexa Fluor® 488 (sc-376832 AF488), Alexa Fluor® 546 (sc-376832 AF546), Alexa Fluor® 594 (sc-376832 AF594) or Alexa Fluor® 647 (sc-376832 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376832 AF680) or Alexa Fluor® 790 (sc-376832 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-376832 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

PAI-RBP1 (F-8) is recommended for detection of PAI-RBP1 isoforms 1-4 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).

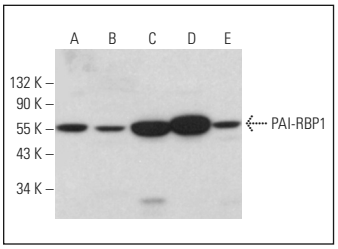
PAI-RBP1 (F-8) is also recommended for detection of PAI-RBP1 isoforms 1-4 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for PAI-RBP1 siRNA (h): sc-88846, PAI-RBP1 siRNA (m): sc-151994, PAI-RBP1 shRNA Plasmid (h): sc-88846-SH, PAI-RBP1 shRNA Plasmid (m): sc-151994-SH, PAI-RBP1 shRNA (h) Lentiviral Particles: sc-88846-V and PAI-RBP1 shRNA (m) Lentiviral Particles: sc-151994-V.

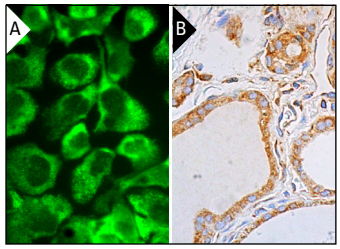
Molecular Weight of PAI-RBP1: 60 kDa.

Positive Controls: Caki-1 cell lysate: sc-2224, RAW 264.7 whole cell lysate: sc-2211 or THP-1 cell lysate: sc-2238.

DATA



PAI-RBP1 (F-8): sc-376832. Western blot analysis of PAI-RBP1 expression in Caki-1 (**A**), RAW 264.7 (**B**), THP-1 (**C**), Daudi (**D**) and WEHI-231 (**E**) whole cell lysates.



PAI-RBP1 (F-8): sc-376832. Immunofluorescence staining of formalin-fixed A-431 cells showing cytoplasmic localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human thyroid gland tissue showing cytoplasmic staining of glandular cells (**B**).

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.