

p38IP (C-7): sc-374665

BACKGROUND

p38IP (p38 interacting protein), also known as C13, FP757, SPT20, FAM48A, C13orf19 or SUPT20H, is a 779 amino acid protein that interacts with p38 MAP kinase. Specifically, p38IP and p38 are required for downregulation of E-cadherin during gastrulation. In adult tissues, p38IP is highly expressed in testis and moderately expressed in brain and pituitary gland. p38IP is also expressed in several fetal tissues, including lung, brain, thymus and kidney. Expression of p38IP has been shown to be downregulated in malignant prostate tissues. The gene encoding p38IP maps to human chromosome 13, which houses over 400 genes and comprises approximately 4% of the human genome. Key tumor suppressor genes on chromosome 13 include the breast cancer susceptibility gene, BRCA2, and the RB1 (retinoblastoma) gene.

REFERENCES

- Dunham, A., et al. 2004. The DNA sequence and analysis of human chromosome 13. *Nature* 428: 522-528.
- Schmidt, U., et al. 2005. Quantification of C13orf19/P38IP mRNA expression by quantitative real-time PCR in patients with urological malignancies. *Cancer Lett.* 225: 253-260.
- Zohn, I.E., et al. 2006. p38 and a p38-interacting protein are critical for downregulation of E-cadherin during mouse gastrulation. *Cell* 125: 957-969.
- Kunze, D., et al. 2006. Functional analyses of C13orf19/P38IP in prostate cell lines. *Oncol. Rep.* 15: 1599-1604.
- Giacinti, C. and Giordano, A. 2006. RB and cell cycle progression. *Oncogene* 25: 5220-5227.

CHROMOSOMAL LOCATION

Genetic locus: SUPT20H (human) mapping to 13q13.3; Supt20 (mouse) mapping to 3 C.

SOURCE

p38IP (C-7) is a mouse monoclonal antibody raised against amino acids 308-423 mapping within an internal region of p38IP 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.

p38IP (C-7) is available conjugated to agarose (sc-374665 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374665 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374665 PE), fluorescein (sc-374665 FITC), Alexa Fluor® 488 (sc-374665 AF488), Alexa Fluor® 546 (sc-374665 AF546), Alexa Fluor® 594 (sc-374665 AF594) or Alexa Fluor® 647 (sc-374665 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374665 AF680) or Alexa Fluor® 790 (sc-374665 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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RESEARCH USE

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

APPLICATIONS

p38IP (C-7) is recommended for detection of p38IP 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for p38IP siRNA (h): sc-105348, p38IP siRNA (m): sc-142818, p38IP shRNA Plasmid (h): sc-105348-SH, p38IP shRNA Plasmid (m): sc-142818-SH, p38IP shRNA (h) Lentiviral Particles: sc-105348-V and p38IP shRNA (m) Lentiviral Particles: sc-142818-V.

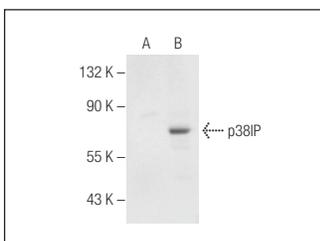
Molecular Weight of p38IP: 86/80 kDa.

Positive Controls: rat testis extract: sc-2400 or human p38IP transfected HEK293T whole cell lysates.

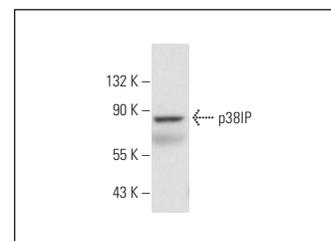
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BPHRP: sc-516102 or m-IgGκ BPHRP (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 BPFITC: sc-516140 or m-IgGκ BPE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



p38IP (C-7): sc-374665. Western blot analysis of p38IP expression in non-transfected (A) and human p38IP transfected (B) HEK293T whole cell lysates.



p38IP (C-7): sc-374665. Western blot analysis of p38IP expression in rat testis tissue extract.

SELECT PRODUCT CITATIONS

- Getiye, Y., et al. 2022. Dysregulated lipolysis and lipophagy in lipid droplets of macrophages from high fat diet-fed obese mice. *J. Cell. Mol. Med.* 26: 4825-4836.
- Yan, K., et al. 2023. SGF29 nuclear condensates reinforce cellular aging. *Cell Discov.* 9: 110.

STORAGE

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