p38IP (H-116): sc-292222

SANTA CRUZ®
BIOTECHNOLOGY

The Power to Question

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

1. Dunham, A., et al. 2004. The DNA sequence and analysis of human chromosome 13. Nature 428: 522-528.

2. 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.

3. 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.

4. Kunze, D., et al. 2006. Functional analyses of C13orf19/P38IP in prostate cell lines. Oncol. Rep. 5: 1599-1604.

5. Giacinti, C. and Giordano, A. 2006. RB and cell cycle progression. Oncogene 25: 5220-5227.

6. Bugge, M., et al. 2007. Non-disjunction of chromosome 13. Hum. Mol. Genet. 16: 2004-2010.

CHROMOSOMAL LOCATION

Genetic locus: SUPT20H (human) mapping to 13q13.3; Fam48a (mouse) mapping to 3 C.

SOURCE

p38IP (H-116) is a rabbit polyclonal antibody raised against amino acids 308-423 mapping within an internal region of p38IP of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

p38IP (H-116) is recommended for detection of p38IP of mouse and human origin and corresponding rat homolog by Western Blotting (starting dilution 1:200, 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).

p38IP (H-116) is also recommended for detection of p38IP in additional species, including equine, canine and bovine.

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.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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