

PCNP (2707C2a): sc-130635

BACKGROUND

PCNP (PEST proteolytic signal containing nuclear protein) is a novel 178 amino acid nuclear protein implied to play a role in cell cycle regulation and tumorigenesis. PCNP is ubiquitinated post-translationally by NIRF (Np95/ICBP90-like RING finger protein), an ubiquitin ligase. Existing as three isoforms produced by alternative splicing events, PCNP is encoded by a gene mapping to human chromosome 3q12.3. Chromosome 3 houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan Syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth Disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

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2. Mori, T., et al. 2002. NIRF, a novel RING finger protein, is involved in cell-cycle regulation. *Biochem. Biophys. Res. Commun.* 296: 530-536.
3. Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. *Mol. Biol.* 37: 194-211.
4. Mori, T., et al. 2004. NIRF is a ubiquitin ligase that is capable of ubiquitinating PCNP, a PEST-containing nuclear protein. *FEBS Lett.* 557: 209-214.
5. Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
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CHROMOSOMAL LOCATION

Genetic locus: PCNP (human) mapping to 3q12.3.

SOURCE

PCNP (2707C2a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to a region near the C-terminus of PCNP of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

RESEARCH USE

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

APPLICATIONS

PCNP (2707C2a) is recommended for detection of PCNP of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

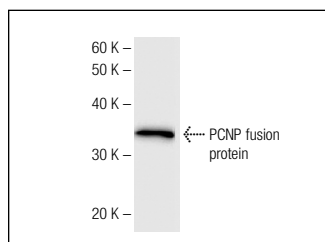
Suitable for use as control antibody for PCNP siRNA (h): sc-78117, PCNP shRNA Plasmid (h): sc-78117-SH and PCNP shRNA (h) Lentiviral Particles: sc-78117-V.

Molecular Weight (predicted) of PCNP: 19 kDa.

Molecular Weight (observed) of PCNP: 26 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 nuclear extract: sc-2130 or Jurkat nuclear extract: sc-2132.

DATA



PCNP (2707C2a): sc-130635. Western blot analysis of human recombinant PCNP fusion protein.

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 for detailed protocols and support products.