SANTA CRUZ BIOTECHNOLOGY, INC.

PNRC2 (N-13): sc-160674

BACKGROUND

PNRC2 (proline-rich nuclear receptor coactivator 2), also known as HSPC208, is a 139 amino acid nuclear protein. Expressed in lung, heart, brain, placenta and skeletal muscle, PNRC2 functions as a nuclear receptor coactivator that interacts with and activates a variety of proteins, including ERα, ERRα, ERRγ, GR and PR. The interaction between PNRC2 and its target receptors is dependent upon the presence of an SH3 binding motif, a small protein domain that has a β-barrel fold and is found in substrate-specific proteins that are involved in signaling pathways. In addition to its role as a nuclear coactivator, PNRC2 may be necessary for maintaining fat stores within the body and is thought to play an important part in controlling the balance between energy expenditure and energy storage.

REFERENCES

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2. Zhou, D. and Chen, S. 2001. PNRC2 is a 16 kDa coactivator that interacts with nuclear receptors through an SH3-binding motif. Nucleic Acids Res. 29: 3939-3948.
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5. Zhou, D., Masri, S., Ye, J.J. and Chen, S. 2005. Transcriptional regulation of the mouse PNRC2 promoter by the nuclear factor Y (NFY) and E2F-1. Gene 361: 89-100.
6. Zhou, D., Ye, J.J., Li, Y., Lui, K. and Chen, S. 2006. The molecular basis of the interaction between the proline-rich SH3-binding motif of PNRC and estrogen receptor α. Nucleic Acids Res. 34: 5974-5986.
7. Zhou, D., Shen, R., Ye, J.J., Li, Y., Tsark, W., Isbell, D., Tso, P. and Chen, S. 2008. Nuclear receptor coactivator PNRC2 regulates energy expenditure and adiposity. J. Biol. Chem. 283: 541-553.

CHROMOSOMAL LOCATION

Genetic locus: PNRC2 (human) mapping to 1p36.11; Pnrc2 (mouse) mapping to 4 D3.

SOURCE

PNRC2 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of PNRC2 of human origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-160674 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PNRC2 (N-13) is recommended for detection of PNRC2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with family member PNRC1.

Suitable for use as control antibody for PNRC2 siRNA (h): sc-78752, PNRC2 siRNA (m): sc-152362, PNRC2 shRNA Plasmid (h): sc-78752-SH, PNRC2 shRNA Plasmid (m): sc-152362-SH, PNRC2 shRNA (h) Lentiviral Particles: sc-78752-V and PNRC2 shRNA (m) Lentiviral Particles: sc-152362-V.

Molecular Weight of PNRC2: 16 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.