SANTA CRUZ BIOTECHNOLOGY, INC.

PNRC1 (I-20): sc-162023



BACKGROUND

PNRC1 (proline-rich nuclear receptor coactivator 1), also known as B4-2, PRR2, PROL2 or PNAS-145, is a 327 amino acid proline-rich protein that participates in protein binding activities and may play a role in signal transduction. Be-longing to the PNRC family and the PNRC1 subfamily, PNRC1 contains a potential N-terminal SH3-binding domain, a nuclear targeting sequence and seven SPxx or TPxx motifs. Interaction between PNRC1 and nuclear receptors, such as AR, ER α , ERR α , ERR γ , GR, SF-1, PR, TR, RAR and RXR, is dependent on the SH3 binding motif. PNRC1 also interacts with GRB2 and functions as a nuclear receptor coactivator. Conserved in chimpanzee, bovine, mouse, rat and chicken, PNRC1 localizes to nucleus and is expressed in liver, lung, fat and NK/T cells. The gene that encodes PNRC1 maps to human chromosome 6q15.

REFERENCES

- Gustafsson, A.C., et al. 2005. Global gene expression analysis in time series following N-acetyl L-cysteine induced epithelial differentiation of human normal and cancer cells *in vitro*. BMC Cancer 5: 75.
- 2. Younossi, Z.M., et al. 2005. Hepatic gene expression in patients with obesity-related non-alcoholic steatohepatitis. Liver Int. 25: 760-771.
- Carayol, N., et al. 2006. A dominant function of IKK/NFκB signaling in global lipopolysaccharide-induced gene expression. J. Biol. Chem. 281: 31142-31151.
- 4. Zhou, D., et al. 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.
- Wang, Y., et al. 2008. Identification and characterization of PNRC splicing variants. Gene 423: 116-124.
- Zhang, Y., et al. 2008. Transcriptional regulation of the human PNRC promoter by NFY in HepG2 cells. J. Biochem. 143: 675-683.
- Zhang, Y., et al. 2009. Transcriptional regulation of the human gene coding for proline-rich nuclear receptor coactivator (pnrc) by regulatory factor x (rfx1). Mol. Biol. 43: 77-84.
- Cho, H., et al. 2009. Human proline-rich nuclear receptor coregulatory protein 2 mediates an interaction between mRNA surveillance machinery and decapping complex. Mol. Cell 33: 75-86.

CHROMOSOMAL LOCATION

Genetic locus: PNRC1 (human) mapping to 6q15; Pnrc1 (mouse) mapping to 4 A5.

SOURCE

PNRC1 (I-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PNRC1 of human origin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

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

Blocking peptide available for competition studies, sc-162023 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PNRC1 (I-20) is recommended for detection of PNRC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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); non cross-reactive with PNRC2.

PNRC1 (I-20) is also recommended for detection of PNRC1 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for PNRC1 siRNA (h): sc-95538, PNRC1 siRNA (m): sc-152361, PNRC1 shRNA Plasmid (h): sc-95538-SH, PNRC1 shRNA Plasmid (m): sc-152361-SH, PNRC1 shRNA (h) Lentiviral Particles: sc-95538-V and PNRC1 shRNA (m) Lentiviral Particles: sc-152361-V.

Molecular Weight of PNRC1: 35 kDa.

Positive Controls: PNRC1 (h): 293T Lysate: sc-113254.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



PNRC1 (I-20): sc-162023. Western blot analysis of PNRC1 expression in non-transfected: sc-117752 (A) and human PNRC1 transfected: sc-113254 (B) 293T whole cell lysates.

RESEARCH USE

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