HCNP (C-9): sc-271037

BACKGROUND

HCNP, also known as XAB2 (xeroderma pigmentosum group A (XPA) binding protein 2), HCRN, SYF1 or NTC90, is a nuclear protein that participates in transcription, transcription-coupled repair (TCR) and pre-mRNA splicing. It contains 15 tetratricopeptide repeat motifs and associates with nucleotide excision repair machinery. More specifically, HCNP associates with Cockayne syndrome group A and B proteins (CSA and CSB), RNA Polymerase II (Pol II) and XPA in response to DNA damage and is believed to function in the TCR pathway. HCNP also functions as an essential component of a pre-mRNA splicing complex of the spliceosome (composed of AQR (aquarius), PRP19, CCDC16, HCNP ISY1 and Cyclophilin E) and is required for proper RNA synthesis in the cell. In addition, HCNP functions as a component of the RAR co-repressor complex with RARα and HDAC3 and exhibits an inhibitory effect on ATRA-induced cell differentiation. This suggests that HCNP may function as useful target in cancer therapy.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: XAB2 (human) mapping to 19p13.2; Xab2 (mouse) mapping to 8 A1.1.

SOURCE

HCNP (C-9) is a mouse monoclonal antibody raised against amino acids 556-855 mapping at the C-terminus of HCNP of human origin.

PRODUCT

Each vial contains 200 µg IgG2b kappa light chain 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.

APPLICATIONS

HCNP (C-9) is recommended for detection of HCNP 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), immunohistochemistry (including paraffin-embedded sections) (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 HCNP siRNA (h): sc-75232, HCNP siRNA (m): sc-75233, HCNP shRNA Plasmid (h): sc-75232-SH, HCNP shRNA Plasmid (m): sc-75233-SH, HCNP shRNA (h) Lentiviral Particles: sc-75232-V and HCNP shRNA (m) Lentiviral Particles: sc-75233-V.

Molecular Weight of HCNP: 100 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136 or Jurkat whole cell lysate: sc-2204.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGk BP-HRP: sc-516102 or m-IgGk BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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 m-IgGk BP-FITC: sc-516140 or m-IgGk BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA

HCNP (C-9): sc-271037. Western blot analysis of HCNP expression in HeLa (A), HEK293 (B), Jurkat (C) and MG63 (D) whole cell lysates.

HCNP (C-9): sc-271037. Immunofluorescence staining of methanol fixed HeLa cells showing nuclear localization (A), Immunoperoxidase staining of formalin fixed, paraffin-embedded human thyroid gland tissue showing nuclear staining of subset of glandular cells (B).

SELECT PRODUCT CITATIONS


RESEARCH USE

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