

HSPC144 (P-12): sc-168115

BACKGROUND

HSPC144, also known as THYN1 (thymocyte nuclear protein 1), THY28 or My0054, is a 225 amino acid nuclear protein that may be involved in the induction of apoptosis. Existing as two alternatively spliced isoforms, the gene encoding HSPC144 is highly conserved among vertebrates and maps to human chromosome 11q25 and mouse chromosome 9 A4. Human chromosome 11 comprises approximately 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The blood disorders Sickle cell anemia and thalassemia are caused by HBB gene mutations, while Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11-encoded genes.

REFERENCES

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2. Jira, P.E., et al. 2003. Smith-Lemli-Opitz syndrome and the DHCR7 gene. *Ann. Hum. Genet.* 67: 269-280.
3. Jiang, X.Z., et al. 2003. Anti-IgM-induced down-regulation of nuclear Thy28 protein expression in Ramos B lymphoma cells. *Apoptosis* 8: 509-519.
4. Jiang, X., et al. 2003. Modulation of mThy28 nuclear protein expression during thymocyte development. *Tissue Cell* 35: 471-478.
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CHROMOSOMAL LOCATION

Genetic locus: THYN1 (human) mapping to 11q25; Thyn1 (mouse) mapping to 9 A4.

SOURCE

HSPC144 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HSPC144 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.

Blocking peptide available for competition studies, sc-168115 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HSPC144 (P-12) is recommended for detection of HSPC144 of mouse, rat and human origin 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); non cross-reactive with other HSPC family members.

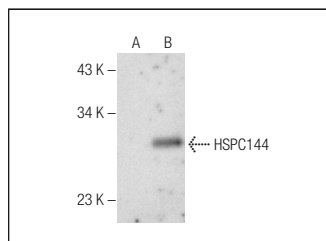
HSPC144 (P-12) is also recommended for detection of HSPC144 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for HSPC144 siRNA (h): sc-96909, HSPC144 siRNA (m): sc-146107, HSPC144 shRNA Plasmid (h): sc-96909-SH, HSPC144 shRNA Plasmid (m): sc-146107-SH, HSPC144 shRNA (h) Lentiviral Particles: sc-96909-V and HSPC144 shRNA (m) Lentiviral Particles: sc-146107-V.

Molecular Weight of HSPC144 isoforms 1/2: 26/19 kDa.

Positive Controls: HSPC144 (m): 293T Lysates: sc-120919.

DATA



HSPC144 (P-12): sc-168115. Western blot analysis of HSPC144 expression in non-transfected: sc-117752 (A) and mouse HSPC144 transfected: sc-120919 (B) 293T whole cell lysates.

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.

STORAGE

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

RESEARCH USE

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