Pontin 52 (N-15): sc-15259



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BACKGROUND

Pontin 52 is a nuclear matrix protein that is primarily expressed in the nucleus and is also present in the cytoplasm. Pontin 52 is expressed in the nucleoplasm of whole cells, but is not present in the nucleoli. Pontin 52 is also designated RuvBL1, for *E. coli* RuvB-like 1 protein, or NMP 238, and is the human homolog of rat TIP49. Pontin 52 contains an ATPase/helicase motif and may represent a class of cofactors recruited by transcriptional activation domains that function in diverse pathways. For instance, *in vivo*, Pontin 52 is complexed with Myc and Reptin 52, which is a Pontin 52 related protein also designated RuvBL2. The interaction of Pontin 52 with Myc is dependent upon a Myc domain essential for oncogenic activity, suggesting that functional Pontin 52 is an essential mediator of Myc oncogenic transformation. The gene encoding human Pontin 52 maps to chromosome 3q21.3.

CHROMOSOMAL LOCATION

Genetic locus: RUVBL1 (human) mapping to 3q21.3; Ruvbl1 (mouse) mapping to 6 D1.

SOURCE

Pontin 52 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Pontin 52 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-15259 X, 200 μg /0.1 ml.

Blocking peptide available for competition studies, sc-15259 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Pontin 52 (N-15) is recommended for detection of Pontin 52 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).

Pontin 52 (N-15) is also recommended for detection of Pontin 52 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Pontin 52 siRNA (h): sc-43543, Pontin 52 siRNA (m): sc-60010, Pontin 52 shRNA Plasmid (h): sc-43543-SH, Pontin 52 shRNA Plasmid (m): sc-60010-SH, Pontin 52 shRNA (h) Lentiviral Particles: sc-43543-V and Pontin 52 shRNA (m) Lentiviral Particles: sc-60010-V.

Pontin 52 (N-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

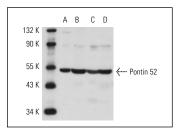
Molecular Weight of Pontin 52: 50 kDa.

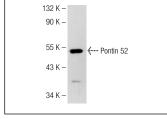
Positive Controls: SK-BR-3 nuclear extract: sc-2134, K-562 nuclear extract: sc-2130 or KNRK nuclear extract: sc-2141.

STORAGE

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

DATA





Pontin 52 (N-15): sc-15259. Western blot analysis of Pontin 52 expression in SK-BR-3 (A), K-562 (B), KNRK (C) and NIH/3T3 (D) nuclear extracts.

Pontin 52 (N-15): sc-15259. Western blot analysis of Pontin 52 expression in SKBR-3 whole cell lysate

SELECT PRODUCT CITATIONS

- Venkataraman, K., et al. 2005. Analysis of a noncanonical poly(A) site reveals a tripartite mechanism for vertebrate poly(A) site recognition. Genes Dev. 19: 1315-1327.
- Lassnig, C., et al. 2005. Multiple mechanisms of ontogenic regulation of nuclear receptors during rat liver development. Am. J. Physiol. Gastrointest. Liver Physiol. 288: G251-G260.
- 3. Meier, N., et al. 2006. Novel binding partners of Ldb1 are required for haematopoietic development. Development 133: 4913-4923.
- 4. Izumi, N., et al. 2012. Heat shock protein 90 regulates phosphatidylinositol 3-kinase-related protein kinase family proteins together with the RUVBL1/2 and Tel2-containing co-factor complex. Cancer Sci. 103: 50-57.
- 5. Layton, MJ., et al. 2012. Solubilisation of the armadillo-repeat protein β -catenin using a zwitterionic detergent allows resolution of phosphorylated forms by 2DE. Electrophoresis 33: 1804-1813.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try Pontin 52 (A-11): sc-393905 or Pontin 52 (H-4): sc-365339, our highly recommended monoclonal aternatives to Pontin 52 (N-15).

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