

HIRIP3 (N-12): sc-109280

BACKGROUND

The HIRIP3 (HIRA interacting protein 3) locus encodes for a 556 amino acid protein that directly interacts with the HIRA histone chaperone. It also interacts weakly with core histones, Histone H2B and Histone H3. HIRIP3 is a heavily phosphorylated nuclear protein and it is found throughout the cell cycle. It is phosphorylated by casein kinase II. HIRIP3 may play a role in chromatin function and histone metabolism. A region (approximately 60 amino acids in length) at the C-terminus of HIRIP3 is highly conserved among vertebrates and it contains residues that are invariantly charged, polar and hydrophobic. Two isoforms of HIRIP3 exist due to alternative splicing. Isoform 1 is predominantly expressed in skeletal muscles and isoform 2 is expressed in the liver and the heart. Human HIRA homologs are thought to be responsible for the DiGeorge syndrome and related developmental disorders.

REFERENCES

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- Lorain, S., et al. 2001. Identification of human and mouse HIRA-interacting protein-5 (HIRIP5), two mammalian representatives in a family of phylogenetically conserved proteins with a role in the biogenesis of Fe/S proteins. *Biochim. Biophys. Acta* 1517: 376-383.
- Ahmad, A., et al. 2005. Different roles of N-terminal and C-terminal halves of HIRA in transcription regulation of cell cycle-related genes that contribute to control of vertebrate cell growth. *J. Biol. Chem.* 280: 32090-32100.
- Frith, M.C., et al. 2006. Evolutionary turnover of mammalian transcription start sites. *Genome Res.* 16: 713-722.
- Luk, E., et al. 2007. Chz1, a nuclear chaperone for Histone H2AZ. *Mol. Cell* 25: 357-368.

CHROMOSOMAL LOCATION

Genetic locus: HIRIP3 (human) mapping to 16p11.2.

SOURCE

HIRIP3 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HIRIP3 of human origin.

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.

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-109280 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HIRIP3 (N-12) is recommended for detection of HIRIP3 of 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).

Suitable for use as control antibody for HIRIP3 siRNA (h): sc-93460, HIRIP3 shRNA Plasmid (h): sc-93460-SH and HIRIP3 shRNA (h) Lentiviral Particles: sc-93460-V.

Molecular Weight (predicted) of HIRIP3: 62 kDa.

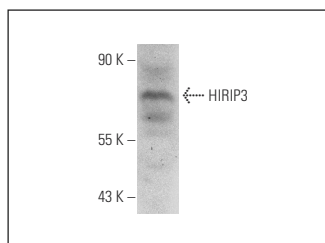
Molecular Weight (observed) of HIRIP3: 90 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132.

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



HIRIP3 (N-12): sc-109280. Western blot analysis of HIRIP3 expression in Jurkat nuclear extract.

PROTOCOLS

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