

# SLX4IP (N-15): sc-85454

## BACKGROUND

SLX4IP (SLX4 interacting protein), also known as C20orf94, is a 408 amino acid protein belonging to the SLX4IP family. A monoallelic deletion of the 5' region of SLX4IP by illegitimate V(D)J-mediated recombination is found in a percentage of patients with acute lymphoblastic leukemia. Acute lymphoblastic leukemia is observed with approximately 20% higher incidence in males than females, with deletions affecting SLX4IP and TAL1 associated with the disease occurring significantly more frequently in males. The SLX4IP gene is located on chromosome 20p12.2 in humans, and is conserved in chimpanzee, Rhesus monkey, canine, mouse, rat, chicken, and frog. Representing about 2% of human DNA, chromosome 20 consists of approximately 63 million bases and 600 genes. Chromosome 20 contains a region with numerous genes expressed in the epididymis that are thought important for seminal production and some viewed as potential targets for male contraception.

## REFERENCES

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- O'Rand, M.G., et al. 2007. Eppin: an epididymal protease inhibitor and a target for male contraception. *Soc. Reprod. Fertil. Suppl.* 63 : 445-453.
- Svensden, J.M., et al. 2009. Mammalian BTBD12/SLX4 assembles a Holliday junction resolvase and is required for DNA repair. *Cell* 138: 63-77.
- Warnatz, H.J., et al. 2011. The BTB and CNC homology 1 (BACH1) target genes are involved in the oxidative stress response and in control of the cell cycle. *J. Biol. Chem.* 286: 23521-23532.
- Ghosal, G., et al. 2012. Proliferating cell nuclear antigen (PCNA)-binding protein C1orf124 is a regulator of translesion synthesis. *J. Biol. Chem.* 287: 34225-34233.
- Laguet, N., et al. 2014. Premature activation of the SLX4 complex by Vpr promotes G<sub>2</sub>/M arrest and escape from innate immune sensing. *Cell* 156: 134-145.
- Meissner, B., et al. 2014. Frequent and sex-biased deletion of SLX4IP by illegitimate V(D)J-mediated recombination in childhood acute lymphoblastic leukemia. *Hum. Mol. Genet.* 23: 590-601.

## CHROMOSOMAL LOCATION

Genetic locus: SLX4IP (human) mapping to 20p12.2.

## SOURCE

SLX4IP (N-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SLX4IP of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85454 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SLX4IP (N-15) is recommended for detection of SLX4IP 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 SLX4IP siRNA (h): sc-72749, SLX4IP shRNA Plasmid (h): sc-72749-SH and SLX4IP shRNA (h) Lentiviral Particles: sc-72749-V.

Molecular Weight of SLX4IP: 45 kDa.

Positive Controls: SK-BR-3 cell lysate: sc-2218, Hep G2 cell lysate: sc-2227 or LNCaP whole cell lysate: sc-2231.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.