

SLX4IP (G-4): sc-377066

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 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

1. Lundwall, A. 2007. A locus on chromosome 20 encompassing genes that are highly expressed in the epididymis. *Asian J. Androl.* 9: 540-544.
2. 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.
3. Svendsen, J.M., et al. 2009. Mammalian BTBD12/SLX4 assembles a Holliday junction resolvase and is required for DNA repair. *Cell* 138: 63-77.
4. 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.

CHROMOSOMAL LOCATION

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

SOURCE

SLX4IP (G-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 291-323 within an internal region of SLX4IP of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SLX4IP (G-4) is available conjugated to agarose (sc-377066 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377066 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377066 PE), fluorescein (sc-377066 FITC), Alexa Fluor® 488 (sc-377066 AF488), Alexa Fluor® 546 (sc-377066 AF546), Alexa Fluor® 594 (sc-377066 AF594) or Alexa Fluor® 647 (sc-377066 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377066 AF680) or Alexa Fluor® 790 (sc-377066 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-377066 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

SLX4IP (G-4) is recommended for detection of SLX4IP of 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) 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.

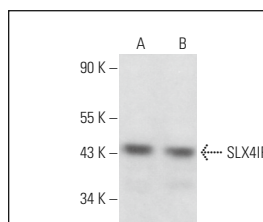
Molecular Weight of SLX4IP: 45 kDa.

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

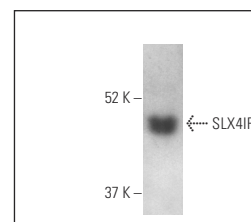
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



SLX4IP (G-4): sc-377066. Western blot analysis of SLX4IP expression in SK-BR-3 (A) and Hep G2 (B) whole cell lysates.



SLX4IP (G-4) HRP: sc-377066 HRP. Direct western blot analysis of SLX4IP expression in LNCaP whole cell lysate.

SELECT PRODUCT CITATIONS

1. Panier, S., et al. 2019. SLX4IP antagonizes promiscuous BLM activity during ALT maintenance. *Mol. Cell* 76: 27-43.e11.

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.