

# SLIRP (G-21): sc-134011

## BACKGROUND

SLIRP (SRA stem-loop-interacting RNA-binding protein), also known as DC50 or C14orf156, is a 109 amino acid mitochondrial protein that localizes to the nucleus and is ubiquitously expressed, with highest levels in heart, liver, skeletal muscle and testis. Containing a single RRM (RNA recognition motif) domain, SLIRP acts as a nuclear receptor corepressor and binds the STR7 loop of SRA RNA. In addition to repressing the SRA-mediated nuclear receptor coactivation, SLIRP is also able to repress glucocorticoid (GR), androgen (AR), thyroid (TR) and VDR-mediated transactivation. It is suggested that SLIRP may regulate mitochondrial function and augment the effect of Tamoxifen, a drug that acts as an antagonist of the estrogen receptor and inhibits receptor activity. The gene encoding SLIRP is located on human chromosome 14, which houses over 700 genes and comprises nearly 3.5% of the human genome.

## REFERENCES

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2. Hatchell, E.C., Colley, S.M., Beveridge, D.J., Epis, M.R., Stuart, L.M., Giles, K.M., Redfern, A.D., Miles, L.E., Barker, A., MacDonald, L.M., Arthur, P.G., Lui, J.C., et al. 2006. SLIRP, a small SRA binding protein, is a nuclear receptor corepressor. *Mol. Cell* 22: 657-668.
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5. Colley, S.M. and Leedman, P.J. 2009. SRA and its binding partners: an expanding role for RNA-binding co-regulators in nuclear receptor-mediated gene regulation. *Crit. Rev. Biochem. Mol. Biol.* 44: 25-33.
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7. Chung, S.H. and Lambert, P.F. 2009. Prevention and treatment of cervical cancer in mice using estrogen receptor antagonists. *Proc. Natl. Acad. Sci. USA* 106: 19467-19472.

## CHROMOSOMAL LOCATION

Genetic locus: SLIRP (human) mapping to 14q24.3.

## SOURCE

SLIRP (G-21) is an affinity purified rabbit polyclonal antibody raised against synthetic SLIRP peptide of human origin.

## RESEARCH USE

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

## PRODUCT

Each vial contains 50  $\mu$ g IgG in 500  $\mu$ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

SLIRP (G-21) is recommended for detection of SLIRP of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SLIRP siRNA (h): sc-92406, SLIRP shRNA Plasmid (h): sc-92406-SH and SLIRP shRNA (h) Lentiviral Particles: sc-92406-V.

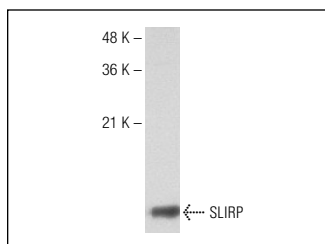
Molecular Weight of SLIRP: 12 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or K-562 nuclear extract: sc-2130.

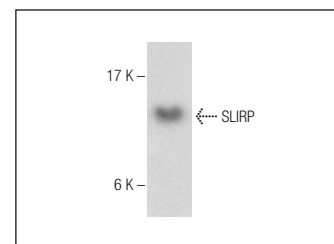
## RECOMMENDED SECONDARY REAGENTS

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).

## DATA



SLIRP (G-21): sc-134011. Western blot analysis of SLIRP expression in Hep G2 whole cell lysate.



SLIRP (G-21): sc-134011. Western blot analysis of SLIRP expression in K-562 nuclear extract.

## SELECT PRODUCT CITATIONS

1. Schweitzer, C.J., Matthews, J.M., Madson, C.J., Donnellan, M.R., Cerny, R.L. and Belshan, M. 2012. Knockdown of the cellular protein LRPPRC attenuates HIV-1 infection. *PLoS ONE* 7: e40537.

## STORAGE

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

## PROTOCOLS

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