

# LUC7L (C-14): sc-66243

## BACKGROUND

LUC7L (Luc7-like 1), also called SR+89 or putative SR protein LUC7B1, is a 371 amino acid member of the Luc7 family. A homolog of the yeast protein, mammalian LUC7L localizes to the nucleus via its arginine/serine-rich domain. Although ubiquitously expressed, LUC7L is rarely detected in adult skeletal muscle. Forced expression of LUC7L in skeletal muscle inhibits myogenesis *in vitro*. Three isoforms exist for LUC7L. Isoform 1 represents the full length protein, isoform 2 is truncated at amino acid 325 and isoform 3 contains a variation in which the first 20 amino acids have been replaced by a different sequence of 3 amino acids.

## REFERENCES

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2. Tufarelli, C., Stanley, J.A., Garrick, D., Sharpe, J.A., Ayyub, H., Wood, W.G. and Higgs, D.R. 2003. Transcription of antisense RNA leading to gene silencing and methylation as a novel cause of human genetic disease. *Nat. Genet.* 34: 157-165.
3. Kimura, E., Hidaka, K., Kida, Y., Morisaki, H., Shirai, M., Araki, K., Suzuki, M., Yamamura, K.I. and Morisaki, T. 2004. Serine-arginine-rich nuclear protein LUC7L regulates myogenesis in mice. *Gene* 341: 41-47.
4. Tufarelli, C., Hardison, R., Miller, W., Hughes, J., Clark, K., Ventress, N., Frischauf, A.M. and Higgs, D.R. 2004. Comparative analysis of the  $\alpha$ -like globin clusters in mouse, rat and human chromosomes indicates a mechanism underlying breaks in conserved synteny. *Genome Res.* 14: 623-630.
5. De Leo, A.A., Wheeler, D., Lefevre, C., Cheng, J.F., Hope, R., Kuliwaba, J., Nicholas, K.R., Westerman, M. and Graves, J.A. 2005. Sequencing and mapping hemoglobin gene clusters in the Australian model dasyurid marsupial *Sminthopsis macroura*. *Cytogenet. Genome Res.* 108: 333-341.

## CHROMOSOMAL LOCATION

Genetic locus: LUC7L (human) mapping to 16p13.3; Luc7l (mouse) mapping to 17 A3.3.

## SOURCE

LUC7L (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of LUC7L of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-66243 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-66243 X, 200  $\mu$ g/0.1 ml.

## APPLICATIONS

LUC7L (C-14) is recommended for detection of LUC7L of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

LUC7L (C-14) is also recommended for detection of LUC7L in additional species, including equine and canine.

Suitable for use as control antibody for LUC7L siRNA (h): sc-62569, LUC7L siRNA (m): sc-62570, LUC7L shRNA Plasmid (h): sc-62569-SH, LUC7L shRNA Plasmid (m): sc-62570-SH, LUC7L shRNA (h) Lentiviral Particles: sc-62569-V and LUC7L shRNA (m) Lentiviral Particles: sc-62570-V.

LUC7L (C-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of LUC7L: 44 kDa.

## 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) 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.

## 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.