

LUC7L (43-I): sc-101075

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isoform 2 is truncated at amino acid 325 and isoform 3 contains a variation in which the first 20 amino acids have been replaced by a different sequence of 3 amino acids.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

1. Tufarelli, C., et al. 2001. Characterization of a widely expressed gene (LUC7-LIKE; LUC7L) defining the centromeric boundary of the human α -globin domain. *Genomics* 71: 307-314.
2. Tufarelli, C., et al. 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. Tufarelli, C., et al. 2004. Comparative analysis of the α -like globin clusters in mouse, rat and human chromosomes indicates a mechanism underlying breaks in conserved synteny. *Genome Res.* 14: 623-630.

CHROMOSOMAL LOCATION

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

SOURCE

LUC7L (43-I) is a mouse monoclonal antibody raised against recombinant LUC7L of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

LUC7L (43-I) is recommended for detection of LUC7L of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 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.

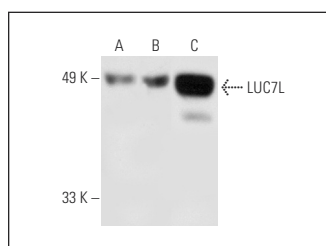
Molecular Weight of LUC7L: 44 kDa.

Positive Controls: mouse brain extract: sc-2253, IMR-32 cell lysate: sc-2409 or LUC7L (h): 293T Lysate: sc-116870.

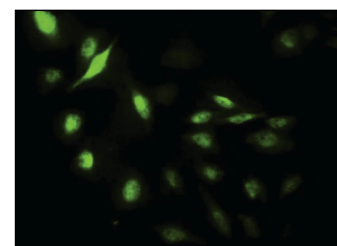
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



LUC7L (43-I): sc-101075. Western blot analysis of LUC7L expression in non-transfected 293T: sc-117752 (A), human LUC7L transfected 293T: sc-116870 (B) and IMR-32 (C) whole cell lysates.



LUC7L (43-I): sc-101075. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Jourdain, A.A., et al. 2021. Loss of LUC7L2 and U1 snRNP subunits shifts energy metabolism from glycolysis to OXPHOS. *Mol. Cell* 81: 1905-1919.e12.

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 for detailed protocols and support products.