SANTA CRUZ BIOTECHNOLOGY, INC.

LUC7L2 (K-16): sc-160501



BACKGROUND

LUC7L2 (LUC7-like 2), also known as CGI-59, CGI-74, LUC7B2 or hLuc7B2, is a 392 amino acid protein and member of the Luc7 family. A homolog of the yeast protein, mammalian LUC7L2 may bind to RNA via its arginine/serinerich domain and may be involved in recognition of non-consensus splice donor sites. Containing a single highly conserved C_2H_2 -type zinc finger, LUC7L2 is widely expressed and undergoes alternative splicing and polyadenylation. LUC7L2 is encoded by a gene located on human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to Osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

REFERENCES

- Liang, H., et al. 1998. Molecular anatomy of chromosome 7q deletions in myeloid neoplasms: evidence for multiple critical loci. Proc. Natl. Acad. Sci. USA 95: 3781-3785.
- 2. 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.
- 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.
- Kimura, E., et al. 2004. Serine-arginine-rich nuclear protein LUC7L regulates myogenesis in mice. Gene 341: 41-47.
- Howell, V.M., et al. 2007. Evidence for a direct role of the disease modifier SCNM1 in splicing. Hum. Mol. Genet. 16: 2506-2516.
- Brezinová, J., et al. 2007. Structural aberrations of chromosome 7 revealed by a combination of molecular cytogenetic techniques in myeloid malignancies. Cancer Genet. Cytogenet. 173: 10-16.
- Kwon, M.J., et al. 2009. Identification of novel reference genes using multiplatform expression data and their validation for quantitative gene expression analysis. PLoS ONE 4: e6162.

CHROMOSOMAL LOCATION

Genetic locus: LUC7L2 (human) mapping to 7q34; Luc7l2 (mouse) mapping to 6 B1.

SOURCE

LUC7L2 (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of LUC7L2 of human origin.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160501 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LUC7L2 (K-16) is recommended for detection of LUC7L2 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); non cross-reactive with LUC7L.

Suitable for use as control antibody for LUC7L2 siRNA (h): sc-89887, LUC7L2 siRNA (m): sc-149140, LUC7L2 shRNA Plasmid (h): sc-89887-SH, LUC7L2 shRNA Plasmid (m): sc-149140-SH, LUC7L2 shRNA (h) Lentiviral Particles: sc-89887-V and LUC7L2 shRNA (m) Lentiviral Particles: sc-149140-V.

Molecular Weight of LUC7L2: 47 kDa.

Positive Controls: LUC7L2 (h): 293T Lysate: sc-112201, K-562 whole cell lysate: sc-2203 or Jurkat nuclear extract: sc-2132.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA





LUC7L2 (K-16): sc-160501. Western blot analysis of LUC7L2 expression in non-transfected 293T: sc-11752 (A), human LUC7L2 transfected 293T: sc-112201 (B) and HeLa (C) whole cell lysates. LUC7L2 (K-16): sc-160501. Western blot analysis of LUC7L2 expression in K-562 $({\rm A}),$ Ramos $({\rm B})$ and Jurkat $({\rm C})$ nuclear extracts.

STORAGE

Store at 4° C, **D0 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.