**BACKGROUND**

Sm and Sm-like (LSm) proteins form donut-shaped heptameric complexes that are involved in various steps of RNA metabolism. LSm proteins facilitate RNA protein interactions and structural changes that are required during ribosomal subunit assembly. LSm proteins contain a Sm sequence motif which has two regions separated by a linker of variable length that forms a loop. LSm5, also known as YER146W, is a 91 amino acid protein belonging to the snRNP Sm family. Localized to the nucleus, LSm5 has been found to play a role in the formation and function of the U6 snRNP. Specifically, LSm5 binds to the 3’ end of U6 snRNA and facilitates U4/U6 duplex formation.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: LSm5 (human) mapping to 7p14.3; LSm5 (mouse) mapping to 6 B3.

**SOURCE**

LSm5 (C-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 6-28 near the N-terminus of LSm5 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 lambda lightchain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-393073 X, 200 µg/0.1 ml. Blocking peptide available for competition studies, sc-393073 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**STORAGE**

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

**APPLICATIONS**

LSm5 (C-12) is recommended for detection of LSm5 of mouse, rat and 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).

LSm5 (C-12) is also recommended for detection of LSm5 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for LSm5 siRNA (h): sc-75709, LSm5 siRNA (m): sc-75710, LSm5 shRNA Plasmid (h): sc-75709-SH, LSm5 shRNA Plasmid (m): sc-75710-SH, LSm5 shRNA (h) Lentiviral Particles: sc-75709-V and LSm5 shRNA (m) Lentiviral Particles: sc-75710-V.

LSm5 (C-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


**DATA**

![LSm5 fusion protein](image)

LSm5 (C-12): sc-393073. Western blot analysis of human recombinant LSm5 fusion protein.

**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.