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Anti-LSM8 Antibody Picoband™ (monoclonal, 6B11)

Catalog # ABO15078

Product Information

Application	WB, IHC, IF, ICC, FC
Primary Accession	O95777
Host	Mouse
Isotype	Mouse IgG2a
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Lyophilized
Description	Anti-LSM8 Antibody Picoband™ (monoclonal, 6B11) . Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 □g/ml.

Additional Information

Gene ID	51691
Other Names	U6 snRNA-associated Sm-like protein LSm8, LSM8
Calculated MW	10403
Application Details	Western blot, 0.25-0.5 □g/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 □g/ml, Human Immunocytochemistry/Immunofluorescence, 5 □g/ml, Human Flow Cytometry, 1-3 □g/1x10^6 cells, Human, Mouse, Rat
Source	Eukaryota
Contents	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.
Clone Names	Clone: 6B11
Immunogen	E.coli-derived human LSM8 recombinant protein (Position: M1-H96).
Purification	Immunogen affinity purified.
Storage	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.

Protein Information

Name	LSM8

Function	Plays a role in pre-mRNA splicing as component of the U4/U6- U5 tri-snRNP complex that is involved in spliceosome assembly, and as component of the precatalytic spliceosome (spliceosome B complex) (PubMed:28781166). The heptameric LSM2-8 complex binds specifically to the 3'-terminal U-tract of U6 snRNA (PubMed:10523320).
Cellular Location	Nucleus

Background

U6 snRNA-associated Sm-like protein LSm8 is a protein that in humans is encoded by the LSM8 gene. This gene encodes a member of the like-Sm family of proteins. The encoded protein consists of a closed barrel shape, made up of five anti-parallel beta strands and an alpha helix. This protein partners with six paralogs to form a heteroheptameric ring which transiently binds U6 small nuclear RNAs and is involved in the general maturation of RNA in the nucleus.

Images

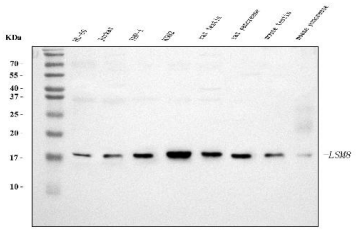
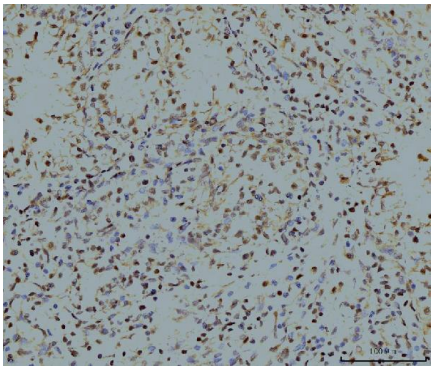


Figure 1. Western blot analysis of LSM8 using anti-LSM8 antibody (M10947).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human HL-60 whole cell lysates,
Lane 2: human Jurkat whole cell lysates,
Lane 3: human THP-1 whole lysates,
Lane 4: human K562 whole cell lysates,
Lane 5: rat testis tissue lysates,
Lane 6: rat pancrease tissue lysates,
Lane 7: mouse testis tissue lysates,
Lane 8: mouse pancrease tissue lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-LSM8 antigen affinity purified monoclonal antibody (Catalog # M10947) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for LSM8 at approximately 16 kDa. The expected band size for LSM8 is at 11 kDa.

Figure 2. IHC analysis of LSM8 using anti-LSM8 antibody (M10947).
LSM8 was detected in a paraffin-embedded section of human renal clear cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-LSM8 Antibody (M10947) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30



minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

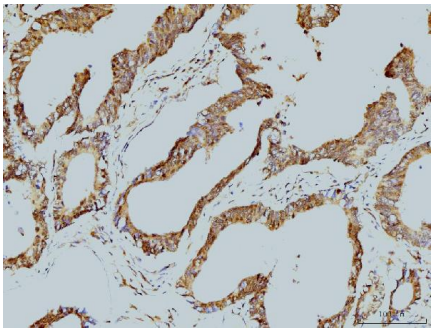


Figure 3. IHC analysis of LSM8 using anti-LSM8 antibody (M10947).
LSM8 was detected in a paraffin-embedded section of human colonic adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-LSM8 Antibody (M10947) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

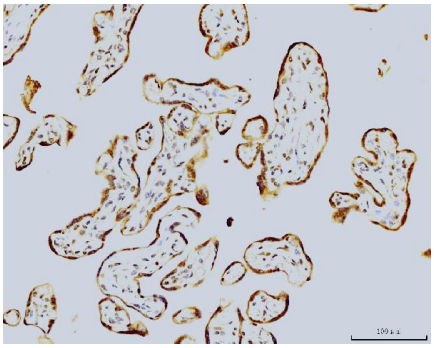


Figure 4. IHC analysis of LSM8 using anti-LSM8 antibody (M10947).
LSM8 was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-LSM8 Antibody (M10947) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

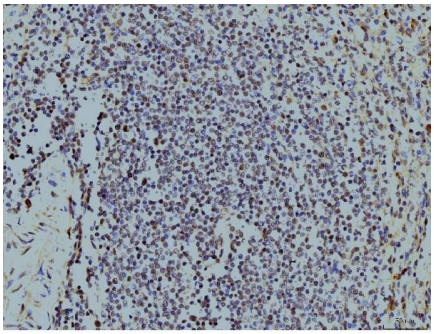
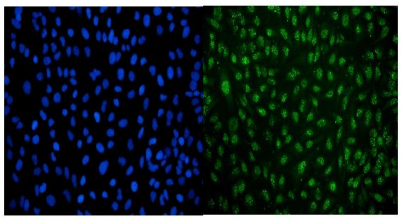


Figure 5. IHC analysis of LSM8 using anti-LSM8 antibody (M10947).
LSM8 was detected in a paraffin-embedded section of human spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-LSM8 Antibody (M10947) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

Figure 6. IF analysis of LSM8 using anti-LSM8 antibody (M10947).
LSM8 was detected in an immunocytochemical section of Hela cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15



mins. The cells were blocked with 10% goat serum. And then incubated with 5 µg/mL mouse anti-LSM8 Antibody (M10947) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

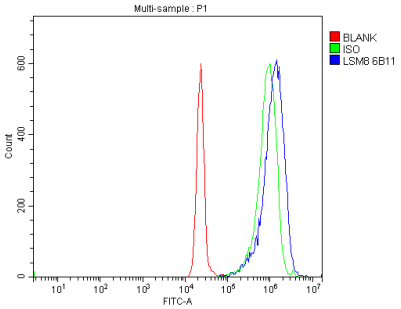


Figure 7. Flow Cytometry analysis of JK cells using anti-LSM8 antibody (M10947).
Overlay histogram showing JK cells stained with M10947 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-LSM8 Antibody (M10947, 1 µg/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 µg/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

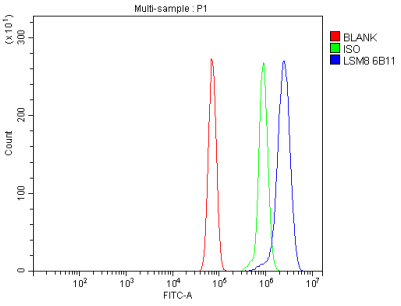


Figure 8. Flow Cytometry analysis of RH35 cells using anti-LSM8 antibody (M10947).
Overlay histogram showing RH35 cells stained with M10947 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-LSM8 Antibody (M10947, 1 µg/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 µg/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

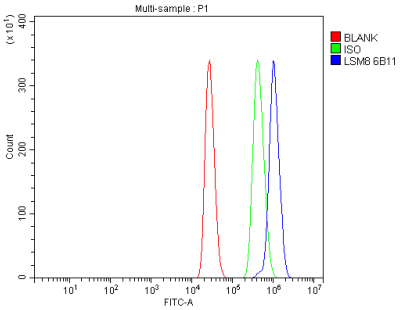


Figure 9. Flow Cytometry analysis of RAW264.7 cells using anti-LSM8 antibody (M10947).
Overlay histogram showing RAW264.7 cells stained with M10947 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-LSM8 Antibody (M10947, 1 µg/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 µg/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.