SANTA CRUZ BIOTECHNOLOGY, INC.

EXOSC10 (A-24): sc-133569

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The exosome is a multi-subunit complex composed of several highly conserved proteins, some of which are 3' to 5' exoribonucleases. The complex is involved in a variety of cellular processes and is responsible for degrading unstable mRNAs that contain AU-rich (ARE) elements in their untranslated 3' region. EXOSC10, also known as PMSCL, PMSCL2, p2, p3, p4, RRP6, Rrp6p, PM-Scl or PM/Scl-100, is an 885 amino acid protein that contains one HRDC domain and one 3'-5' enonuclease domain. Localized to both the cytoplasm and the nucleus, EXOSC10 is part of the post-splicing exosome complex and is involved in mRNA surveillance, mRNA nuclear export and nonsense-mediated decay of mRNAs containing premature stop codons. Antibodies against EXOSC10 have been found in patients with scleroderma and/or polymyositis (chronic diseases of the skin and muscle, respectively), suggesting that EXOSC10 may be involved in the pathogenesis of these diseases. Two isoforms of EXOSC10 exist due to alternative splicing events.

REFERENCES

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3. Brouwer, R., Vree Egberts, W.T., Hengstman, G.J., Raijmakers, R., van Engelen, B.G., Seelig, H.P., Renz, M., Mierau, R., Genth, E., Pruijn, G.J. and van Venrooij, W.J. 2002. Autoantibodies directed to novel components of the PM/Scl complex, the human exosome. Arthritis Res. 4: 134-138.
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5. Selva-O'Callaghan, A., Mijares-Boeckh-Behrens, T., Labrador-Horrillos, M., Solans-Laque, R., Ma Grau-Junyent, J. and Vilardell-Tarres, M. 2003. Anti-PM-Scl antibodies in a patient with inclusion body myositis. Rheumatology 42: 1016-1018.

CHROMOSOMAL LOCATION

Genetic locus: EXOSC10 (human) mapping to 1p36.22.

SOURCE

EXOSC10 (A-24) is a Protein A purified rabbit polyclonal antibody raised against synthetic EXOSC10 peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

APPLICATIONS

EXOSC10 (A-24) is recommended for detection of EXOSC10 of human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (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 EXOSC10 siRNA (h): sc-88207, EXOSC10 shRNA Plasmid (h): sc-88207-SH and EXOSC10 shRNA (h) Lentiviral Particles: sc-88207-V.

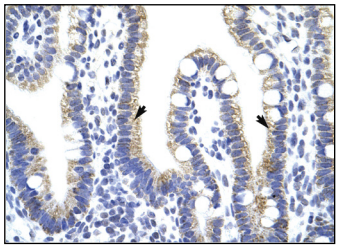
Molecular Weight of EXOSC10: 100 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



EXOSC10 (A-24): sc-133569. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human intestine tissue showing cytoplasmic localization.

RESEARCH USE

For research use only, not for use in diagnostic procedures.