EXOSC10 (B-8): sc-374595

**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 elements in their untranslated 3’ region. EXOSC10, also known as PMSC1, PMSC2, 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’ exonuclease 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**


**CHROMOSOMAL LOCATION**

Genetic locus: EXOSC10 (human) mapping to 1p36.22; Exosc10 (mouse) mapping to 4 E2.

**SOURCE**

EXOSC10 (B-8) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of EXOSC10 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain 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-374595 X, 200 µg/0.1 ml.

EXOSC10 (B-8) is available conjugated to agarose (sc-374595 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374595 HRP), 200 µg/ml, for WB, HICIP and ELISA; to either phycoerythrin (sc-374595 PE), fluorescein (sc-374595 FITC), Alexa Fluor® 488 (sc-374595 AF488), Alexa Fluor® 546 (sc-374595 AF546), Alexa Fluor® 594 (sc-374595 AF594) or Alexa Fluor® 647 (sc-374595 AF647), 200 µg/ml, for WB (RGB), IF, HICIP and FCM; and to either Alexa Fluor® 680 (sc-374595 AF680) or Alexa Fluor® 790 (sc-374595 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**STORAGE**

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

**APPLICATIONS**

EXOSC10 (B-8) is recommended for detection of EXOSC10 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), 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 siRNA (m): sc-105340, EXOSC10 shRNA Plasmid (h): sc-88207-SH, EXOSC10 shRNA Plasmid (m): sc-105340-SH, EXOSC10 shRNA (h) Lentiviral Particles: sc-88207-V and EXOSC10 shRNA (m) Lentiviral Particles: sc-105340-V.

EXOSC10 (B-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of EXOSC10: 100 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, EOC 20 whole cell lysate: sc-364187 or WEHI-231 whole cell lysate: sc-2213.

**DATA**

EXOSC10 (B-8): sc-374595. Western blot analysis of EXOSC10 expression in K-562 (A), EOC 20 (B), WEHI-231 (C), F9 (D) and IMR-32 (E) whole cell lysates.

EXOSC10 (B-8): sc-374595. Immunofluorescence staining of formalin-fixed A-431 cells showing nucleolar and nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing nuclear, cytoplasmic staining of keratinocytes, Langerhans cells and melanocytes (B).

**SELECT PRODUCT CITATIONS**

2. Rubio, K., et al. 2019. Inactivation of nuclear histone deacetylases by kappa light chain in 1.0 ml of PBS with < 790 (sc-374595 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**RESEARCH USE**

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