

# Rabbit Anti-EXOSC10 antibody

SL13120R

Product Name:	EXOSC10
Chinese Name:	多发性肌炎/硬皮病自身抗原2抗体
Alias:	Autoantigen PM/Scl 2; Exosc10; Exosome component 10; EXOSX_HUMAN; P100 polymyositis scleroderma overlap syndrome associated autoantigen; P100 polymyositis- scleroderma overlap syndrome-associated autoantigen; p2; p3; p4; PM Scl; PM/Scl 100; PM/Scl-100; PMSCL; PMSCL2; Polymyositis/scleroderma autoantigen 100 kDa; Polymyositis/scleroderma autoantigen 2 100 kDa; Polymyositis/scleroderma autoantigen 2; RRP6; Rrp6p.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100- 500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	101kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human EXOSC10/PMSCL2:41-140/885
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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 AUrich (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 nonsensemediated 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.

#### Function:

Putative catalytic component of the RNA exosome complex which has 3'->5' exoribonuclease activity and participates in a multitude of cellular RNA processing and degradation events. In the nucleus, the RNA exosome complex is involved in proper maturation of stable RNA species such as rRNA, snRNA and snoRNA, in the elimination of RNA processing by-products and non-coding 'pervasive' transcripts, such as anti-sense RNA species and promoter-upstream transcripts (PROMPTs), and of mRNAs with processing defects, thereby limiting or excluding their export to the cytoplasm. The RNA exosome may be involved in Ig class switch recombination (CSR) and/or Ig variable region somatic hypermutation (SHM) by targeting AICDA deamination activity to transcribed dsDNA substrates. In the cytoplasm, the RNA exosome complex is involved in general mRNA turnover and specifically degrades inherently unstable mRNAs containing AU-rich elements (AREs) within their 3' untranslated regions, and in RNA surveillance pathways, preventing translation of aberrant mRNAs. It seems to be involved in degradation of histone mRNA. EXOSC10 has 3'-5' exonuclease activity (By similarity). EXOSC10 is required for nucleolar localization of C1D and probably mediates the association of SKIV2L2, C1D and MPP6 wth the RNA exosome involved in the maturation of 5.8S rRNA.

## Subunit:

Component of the RNA exosome complex. The catalyticallyinactive RNA exosome core (Exo-9) complex is believed to associate with catalytic subunits EXOSC10, and DIS3 or DIS3L incytoplasmic-and nuclear-specific RNA exosome complex forms. Interacts with C1D and MPHOSPH6.

#### Subcellular Location:

Cytoplasm. Nucleus > nucleolus. Nucleus. Strongly enriched in the nucleolus and a small amount has been found in cytoplasm supporting the existence of a nucleolar RNA exosome complex form.

### Similarity:

Contains 1 3'-5' exonuclease domain. Contains 1 HRDC domain.

# SWISS: Q01780 Gene ID: 5394 Database links: Entrez Gene: 5394Human Entrez Gene: 50912Mouse Omim: 605960Human stech.com SwissProt: Q01780Human SwissProt: P56960Mouse Unigene: 632368Human Unigene: 266635Mouse **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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