

Rabbit Anti-Emerin antibody

SL6660R

Product Name:	Emerin
Chinese Name:	Emerin蛋白抗体
Alias:	EDMD; EMD; EMD HUMAN; Emery Dreifuss muscular dystrophy; STA.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Cow, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	28kDa
Cellular localization:	The nucleus The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Emerin:25-125/254
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:	Stabilizes and promotes the formation of a nuclear actin cortical network. Stimulates
	actin polymerization in vitro by binding and stabilizing the pointed end of growing
	filaments. Inhibits beta-catenin activity by preventing its accumulation in the nucleus.
	Acts by influencing the nuclear accumulation of beta-catenin through a CRM1-
	dependent export pathway. Links centrosomes to the nuclear envelope via a
	microtubule association. EMD and BAF are cooperative cofactors of HIV-1 infection.
	Association of EMD with the viral DNA requires the presence of BAF and viral

integrase. The association of viral DNA with chromatin requires the presence of BAF and EMD. Required for proper localization of non-farnesylated prelamin-A/C. Tissue specificity; Skeletal muscle, heart, colon, testis, ovary and pancreas.

Function:

Stabilizes and promotes the formation of a nuclear actin cortical network. Stimulates actin polymerization in vitro by binding and stabilizing the pointed end of growing filaments. Inhibits beta-catenin activity by preventing its accumulation in the nucleus. Acts by influencing the nuclear accumulation of beta-catenin through a CRM1-dependent export pathway. Links centrosomes to the nuclear envelope via a microtubule association. EMD and BAF are cooperative cofactors of HIV-1 infection. Association of EMD with the viral DNA requires the presence of BAF and viral integrase. The association of viral DNA with chromatin requires the presence of BAF and EMD. Required for proper localization of non-farnesylated prelamin-A/C.

Subunit:

Interacts with lamins A and C, BANF1, GMCL, BCLAF1 and YTHDC1/YT521. Interacts with TMEM43; the interaction retains emerin in the nuclear inner membrane. Interacts with SUN1 and SUN2. Interacts with ACTB, SPTAN1, F-actin, CTNNB1 and beta-tubulin.

Subcellular Location:

Nucleus inner membrane; Single-pass membrane protein; Nucleoplasmic side. Nucleus outer membrane. Note=Colocalized with BANF1 at the central region of the assembling nuclear rim, near spindle-attachment sites. The accumulation of different intermediates of prelamin-A/C (non-farnesylated or carboxymethylated farnesylated prelamin-A/C) in fibroblasts modify its localization in the nucleus.

Tissue Specificity:

Skeletal muscle, heart, colon, testis, ovary and pancreas.

Post-translational modifications:

Found in four different phosphorylated forms, three of which appear to be associated with the cell cycle.

DISEASE:

Defects in EMD are the cause of Emery-Dreifuss muscular dystrophy type 1 (EDMD1) [MIM:310300]. A degenerative myopathy characterized by weakness and atrophy of muscle without involvement of the nervous system, early contractures of the elbows Achilles tendons and spine, and cardiomyopathy associated with cardiac conduction defects.

Similarity: Contains 1 LEM domain.

SWISS:

P50402 Gene ID: 2010 Database links: Entrez Gene: 2010Human Entrez Gene: 13726Mouse Entrez Gene: 25437Rat joiotech. Omim: 300384Human SwissProt: P50402Human SwissProt: 008579Mouse SwissProt: Q63190Rat Unigene: 522823Human Unigene: 18892Mouse Unigene: 10968Rat Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.