

EMD Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6525b

Product Information

Application	WB, FC, E
Primary Accession	<u>P50402</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19617
Calculated MW	28994
Antigen Region	187-213

Additional Information

Gene ID	2010
Other Names	Emerin, EMD, EDMD, STA
Target/Specificity	This EMD antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 187-213 amino acids from the C-terminal region of human EMD.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	EMD Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EMD
Synonyms	EDMD, STA
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. Required for proper localization of non- farnesylated prelamin-A/C. Together with NEMP1, contributes to nuclear envelope stiffness in germ cells (PubMed: <u>32923640</u>). 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.
Cellular 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 Location	Skeletal muscle, heart, colon, testis, ovary and pancreas

Background

Emerin is a serine-rich nuclear membrane protein and a member of the nuclear lamina-associated protein family. It mediates membrane anchorage to the cytoskeleton. Dreifuss-Emery muscular dystrophy is an X-linked inherited degenerative myopathy resulting from mutation in the emerin gene.

References

Asioli,S., Histopathology 54 (5), 571-579 (2009) Tilgner,K., J. Cell. Sci. 122 (PT 3), 401-413 (2009)

Images



MDA-231 Cell

Western blot analysis of EMD antibody (C-term) (Cat.# AP6525b) in MCF-7 cell line lysates (35ug/lane). EMD (arrow) was detected using the purified Pab.

Flow cytometric analysis of MDA-231 cells using EMD Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis. Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.