

### **EMD Antibody (C-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6525b

### Specification

# EMD Antibody (C-term) - Product Information

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

## **EMD** Antibody (C-term) - 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** FC~~1:10~50 WB~~1:1000 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.

### EMD Antibody (C-term) - 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

## **EMD Antibody (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

EMD Antibody (C-term) - Images



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.

## EMD Antibody (C-term) - 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.

## **EMD Antibody (C-term) - References**

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