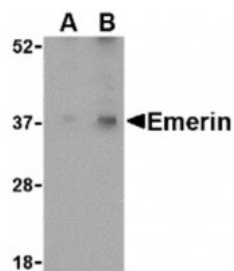




## Emerin Antibody

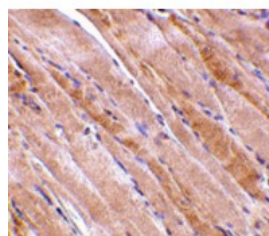
CATALOG NUMBER: 4031



Western blot analysis of Emerin in human skeletal muscle tissue lysate with Emerin antibody at (A) 0.5 and (B) 1 ug/mL.



Immunofluorescence of Emerin in Human Skeletal Muscle cells with Emerin antibody at 5 ug/mL.



Immunohistochemistry of Emerin in human skeletal muscle tissue with Emerin antibody at 2.5 ug/mL.

### Specifications

<b>SPECIES REACTIVITY:</b>	Human, Mouse, Rat
<b>TESTED APPLICATIONS:</b>	ELISA, IF, IHC-P, WB
<b>APPLICATIONS:</b>	Emerin antibody can be used for detection of Emerin by Western blot at 0.5 - 1 ug/mL. Antibody can also be used for immunohistochemistry starting at 2.5 ug/mL. For immunofluorescence start at 10 ug/mL.
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.
<b>POSITIVE CONTROL:</b>	1) Cat. No. 1375 - Human Skeletal Muscle Tissue Lysate
<b>IMMUNOGEN:</b>	Emerin antibody was raised against a 19 amino acid synthetic peptide from near the amino terminus of human Emerin.  The immunogen is located within the first 50 amino acids of Emerin.
<b>HOST SPECIES:</b>	Rabbit

### Properties

<b>PURIFICATION:</b>	Emerin Antibody is affinity chromatography purified via peptide column.
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	Emerin Antibody is supplied in PBS containing 0.02% sodium azide.
<b>CONCENTRATION:</b>	1 mg/mL
<b>STORAGE CONDITIONS:</b>	Emerin antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
<b>CLONALITY:</b>	Polyclonal
<b>ISOTYPE:</b>	IgG
<b>CONJUGATE:</b>	Unconjugated

### Additional Info

<b>ALTERNATE NAMES:</b>	Emerin Antibody: STA, EDMD, LEMD5, STA, Emerin
<b>ACCESSION NO.:</b>	NP_000108

<b>PROTEIN GI NO.:</b>	4557553
<b>OFFICIAL SYMBOL:</b>	EMD
<b>GENE ID:</b>	2010

## Background

**BACKGROUND:** Emerin Antibody: Emerin is a serine-rich nuclear membrane protein and a member of the nuclear lamina-associated protein family that includes proteins such as LAP2 and MAN1. Each family member, including Emerin, has an ~40 amino acid LEM-domains that binds barrier-to-autointegration (BANF1), a conserved chromatin protein that also serves as a host cell component of retroviral integration complexes, including that of HIV. Emerin is anchored at the inner membrane of the nuclear envelope where it binds to nuclear intermediate filaments that are formed by lamin proteins. Dreifuss-Emery muscular dystrophy is an X-linked inherited degenerative myopathy resulting from mutation in the emerin gene.

- REFERENCES:**
- 1) Schirmer EC, Florens L, Guan T, et al. Nuclear membrane proteins with potential disease links found by subtractive proteomics. *Science* 2003; 301:1380-2.
  - 2) Cai M, Huang Y, Ghirlando R, et al. Solution structure of the constant region of nuclear envelope protein LAP2 reveals two LEM-domain structures: one binds BAF and the other binds DNA. *EMBO J.* 2001; 20:4399-407.
  - 3) Chen H and Engelman A. The barrier-to-autointegration protein is a host factor for HIV type 1 integration. *Proc. Natl. Acad. Sci. USA* 1998; 95:15270-4.
  - 4) Hutchison CJ. Lamins: building blocks or regulators of gene expression? *Nat. Rev. Mol. Cell Biol.* 2002; 3:848-58.

**FOR RESEARCH USE ONLY**

December 12, 2016