

Anti-Emerin Picoband Antibody
Catalog # ABO10103**Specification**

Anti-Emerin Picoband Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB, IHC-P |
| Primary Accession | P50402 |
| Host | Rabbit |
| Reactivity | Human, Mouse, Rat |
| Clonality | Polyclonal |
| Format | Lyophilized |

Description

Rabbit IgG polyclonal antibody for Emerin(EMD) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Emerin Picoband Antibody - Additional Information

Gene ID 2010

Other Names

Emerin, EMD, EDMD, STA

Calculated MW

28994 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Nucleus inner membrane ; Single-pass membrane protein; Nucleoplasmic side . Nucleus outer membrane. 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.

Protein Name

Emerin

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃N.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human Emerin (1-48aa MDNYADLSDELTTLLRRYNIPHGPVVGSTRRLYEKKIFEYETQRRRL), different from the related mouse sequence by eight amino acids, and from the related rat sequence by nine amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-Emerin Picoband Antibody - 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: <http://www.uniprot.org/citations/32923640>). 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

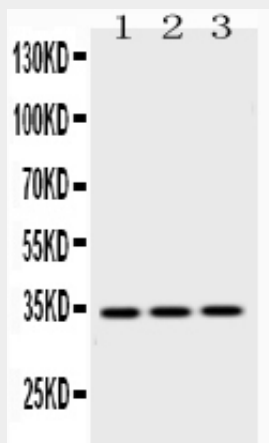
Anti-Emerin Picoband Antibody - Protocols

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

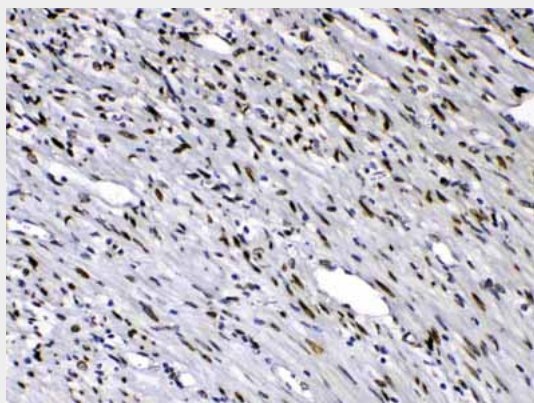
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

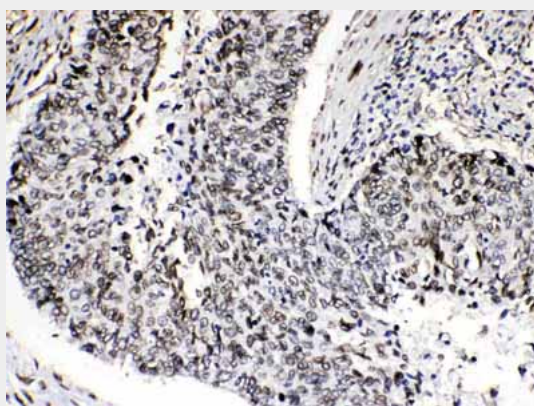
Anti-Emerin Picoband Antibody - Images



Western blot analysis of Emerin expression in rat skeletal muscle extract (lane 1), mouse cardiac muscle extract (lane 2) and HELA whole cell lysates (lane 3). Emerin at 34KD was detected using rabbit anti- Emerin Antigen Affinity purified polyclonal antibody (Catalog # ABO10103) at 0.5 μ g/mL. The blot was developed using chemiluminescence (ECL) method .



Emerin was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- Emerin Antigen Affinity purified polyclonal antibody (Catalog # ABO10103) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .



Emerin was detected in paraffin-embedded sections of human lung cancer tissues using rabbit anti- Emerin Antigen Affinity purified polyclonal antibody (Catalog # ABO10103) at 1 μ g/mL. The

immunohistochemical section was developed using SABC method .

Anti-Emerin Picoband Antibody - Background

Emerin is a serine-rich nuclear membrane protein that in humans is encoded by the EMD gene. And this gene is mapped to Xq28. Emerin is a member of the nuclear lamina-associated protein family. It mediates membrane anchorage to the cytoskeleton. Emery's Dreifuss muscular dystrophy is an X-linked inherited degenerative myopathy resulting from mutation in the EMD (also known clinically as STA) gene. Emerin appears to be involved in mechanotransduction, as emerin-deficient mouse fibroblasts failed to transduce normal mechanosensitive gene expression responses to strain stimuli. In cardiac muscle, emerin is also found complexed to beta-catenin at adherens junctions of intercalated discs, and cardiomyocytes from hearts lacking emerin showed beta-catenin redistribution as well as perturbed intercalated disc architecture and myocyte shape. This interaction appears to be regulated by glycogen synthase kinase 3 beta.