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Anti-Emerin Picoband Antibody

Catalog # ABO10103

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.

Additional Information

Gene ID	2010
Other Names	Emerin, EMD, EDMD, STA
Calculated MW	28994
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/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.
Source	Eukaryota
Protein Name	Emerin
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Emerin (1-48aa MDNYADLSDTELTTLLRRYNIPHGPVVGSTRRLYEKKIFEYETQRRRL), different from the related mouse sequence by eight amino acids, and from the related rat sequence by nine amino ac

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, 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.

Protein Information

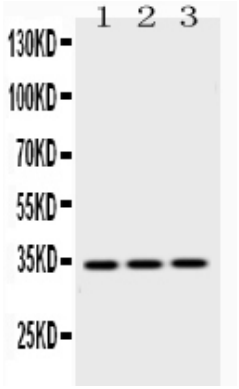
Name	EMD (HGNC:3331)
Function	Stabilizes and promotes the formation of a nuclear actin cortical network. Stimulates actin polymerization in vitro by binding and stabilizing the pointed end of growing filaments (PubMed:15328537). Inhibits beta-catenin activity by preventing its accumulation in the nucleus. Acts by influencing the nuclear accumulation of beta-catenin through a CRM1-dependent export pathway (PubMed:16858403). Links centrosomes to the nuclear envelope via a microtubule association (PubMed:17785515). Required for proper localization of non-farnesylated prelamin-A/C (PubMed:19323649). Together with NEMP1, contributes to nuclear envelope stiffness in germ cells (PubMed: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

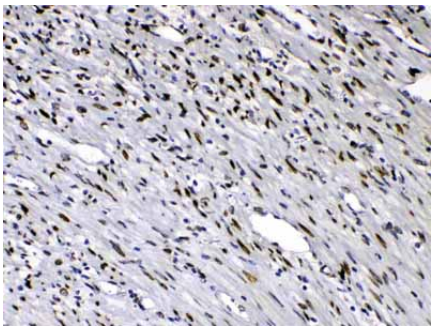
Background

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 â€“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.

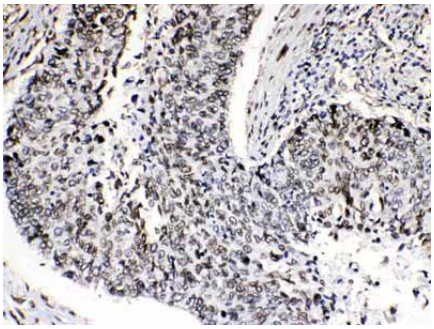
Images

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 Â¼g/mL. The blot was developed using chemiluminescence (ECL) method .





Emerin was detected in paraffin-embedded sections of human intetsinal cancer tissues using rabbit anti- Emerin Antigen Affinity purified polyclonal antibody (Catalog # ABO10103) at 1 □¼g/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 □¼g/mL. The immunohistochemical section was developed using SABC method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.