

KD-Validated Anti-Emerin Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI1517

Specification

KD-Validated Anti-Emerin Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW Gene Name Aliases WB, FC, ICC <u>P50402</u> Rat, Human, Mouse Monoclonal Rabbit IgG Predicted, 29 kDa , observed, 29 kDa KDa EMD EMD; Emerin; STA; LEMD5; LEM Domain Containing 5; EDMD; Emery-Dreifuss Muscular Dystrophy A synthesized peptide derived from human Emerin

Immunogen

KD-Validated Anti-Emerin Rabbit Monoclonal Antibody - Additional Information

Gene ID Other Names Emerin, EMD, EDMD, STA 2010

KD-Validated Anti-Emerin Rabbit Monoclonal 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: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

KD-Validated Anti-Emerin Rabbit Monoclonal Antibody - Protocols

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

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

KD-Validated Anti-Emerin Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Emerin antibody (Cat#AGI1517). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Emerin antibody (Cat#AGI1517, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Emerin antibody (Cat#AGI1517). Emerin expression in wild type (WT) and Emerin shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-Emerin antibody (Cat#AGI1517,



1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Emerin expression in HepG2 cells using anti-Emerin antibody (Cat#AGI1517, 1:2,000). Green, isotype control; red, Emerin.



Immunocytochemical staining of H9C2 cells with anti-Emerin antibody (Cat #AGI1517, 1:1,000). Nuclei were stained blue with DAPI; Emerin was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μ m.