abcam

Product datasheet

Anti-Emerin antibody ab40688



★★★★★ 1 Abreviews 11 References 5 图像

概述

产品名称 Anti-Emerin抗体

描述 兔多克隆抗体to Emerin

宿主 Rabbit

经测试应用 适用于: IP, ICC/IF, WB

种属反应性 与反应: Human

预测可用于: Mouse, Rat, Cow ______

免疫原 Synthetic peptide conjugated to KLH derived from within residues 100 - 200 of Human Emerin.参

阅Abcam的专有抗源政策(Peptide available as ab40723)

阳性对照 WB: HEK-293T, HAP1 and HeLa whole cell lysates; HeLa nuclear lysate. IHC-P: HeLa cells.

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

 $agent. \ \ \ f you would \ like \ information \ about \ the \ formulation \ of \ a \ specific \ lot, \ please \ contact \ our$

scientific support team who will be happy to help.

纯**度** Immunogen affinity purified

1

克隆 多克隆

同种型 lgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab40688于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IP		Use a concentration of 5 µg/ml.
ICC/IF		Use a concentration of 1 µg/ml.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 35 kDa (predicted molecular weight: 25, 29 kDa).

靶标

功能 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. 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.

Required for proper localization of non-farnesylated prelamin-A/C.

组织**特异性** Skeletal muscle, heart, colon, testis, ovary and pancreas.

疾病相关 Defects in EMD are the cause of Emery-Dreifuss muscular dystrophy type 1 (EDMD1)

[MIM:310300]. A degenerative myopathy characterized by weakness and atrophy of muscle without involvement of the nervous system, early contractures of the elbows Achilles tendons and

spine, and cardiomyopathy associated with cardiac conduction defects.

序列相似性 Contains 1 LEM domain.

翻译后修饰 Found in four different phosphorylated forms, three of which appear to be associated with the cell

cycle.

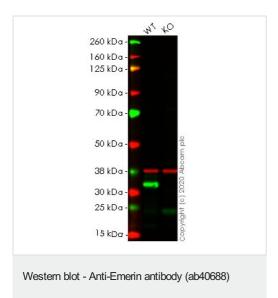
细胞定位 Nucleus inner membrane. Nucleus outer membrane. Colocalized with BANF1 at the central region

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.

图片



All lanes: Anti-Emerin antibody (ab40688) at 1 µg/ml

Lane 1: Wild-type HEK-293T cell lysate

Lane 2: EMD knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

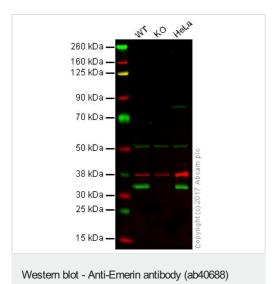
Performed under reducing conditions.

Predicted band size: 25, 29 kDa

Observed band size: 35 kDa

Lanes 1-2: Merged signal (red and green). Green - ab40688 observed at 35 kDa. Red - loading control <u>ab8245</u> observed at 37 kDa.

ab40688 Anti-Emerin antibody was shown to specifically react with Emerin in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line ab266336 (knockout cell lysate ab257423) was used. Wild-type and Emerin knockout samples were subjected to SDS-PAGE. ab40688 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



All lanes: Anti-Emerin antibody (ab40688) at 1 µg/ml

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2: Emerin knockout HAP1 whole cell lysate

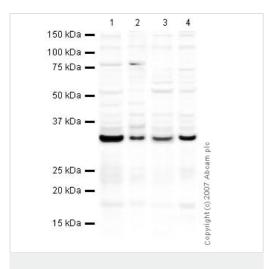
Lane 3: HeLa whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 25, 29 kDa

Lanes 1 - 3: Merged signal (red and green). Green - ab40688 observed at 35 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab40688 was shown to recognize Emerin in wild-type HAP1 cells as signal was lost at the expected MW in Emerin knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and Emerin knockout samples were subjected to SDS-PAGE. Ab40688 and ab9484 (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1 µg/ml and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse lgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Emerin antibody (ab40688)

All lanes: Anti-Emerin antibody (ab40688) at 1 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2 : HeLa (Human epithelial carcinoma cell line) Nuclear Lysate

Lane 3: Jurkat whole cell lysate (ab7899)

Lane 4: Jurkat nuclear extract lysate (ab14844)

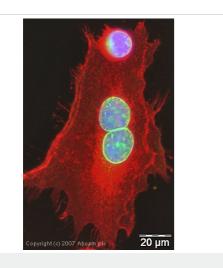
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : IRDye 680 Conjugated Goat Anti-Rabbit lgG (H+L) at 1/10000 dilution

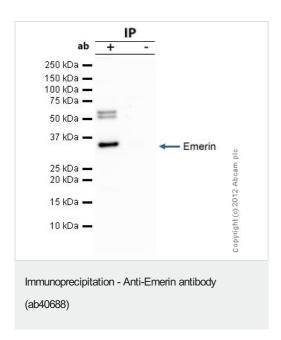
Performed under reducing conditions.

Predicted band size: 25, 29 kDa Observed band size: 33 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Emerin antibody (ab40688)

ICC/IF image of ab40688 stained human HeLa cells. The cells were methanol fixed (5 min), permabilised in TBS-T (20 min) and incubated with the antibody (ab40688, 1µg/ml) for 1h at room temperature. 1%BSA / 10% normal serum / 0.3M glycine was used to quench autofluorescence and block non-specific protein-protein interactions. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red). DAPI was used to stain the cell nuclei (blue).



Emerin was immunoprecipitated using 0.5mg Hela whole cell extract, 5µg of Rabbit polyclonal to Emerin and 50µl of protein G magnetic beads (+). No antibody was added to the control (-). The antibody was incubated under agitation with Protein G beads for 10min, Hela whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40μ I SDS loading buffer and incubated for 10min at 70° C; 10μ I of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab40688.

Secondary: Clean-Blot IP Detection Reagent (HRP) at 1/500 dilution.

Band: 33kDa; Emerin; non specific bands - 52 and 60kDa: We are unsure as to the identity of this extra band.

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