abcam

Product datasheet

Anti-non-muscle Myosin IIA antibody ab75590

敲除验证

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概述

产品名称	Anti-non-muscle Myosin IIA抗体
描述	兔多克隆抗体to non-muscle Myosin IIA
宿主	Rabbit
经测试应用	**适用于:** WB **不适用于:** ICC/IF
种属反应性	**与反应:** Mouse, Rat, Human **预测可用于:** Chicken, Xenopus laevis
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: Wild-type HAP1, HL-60, Jurkat, NIH/3T3, PC-12, HeLa and HEK-293 cell lysate. Human kidney tissue lysate. Mouse kidney and lung tissue lysate.
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. If 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
克隆	**多克隆**
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab75590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
WB	★★★★★ (2)	Use a concentration of 1 µg/ml. Detects a band of approximately 227 kDa (predicted molecular weight: 227 kDa).

应用说明 Is unsuitable for ICC/IF.

靶标

功能 Cellular myosin that appears to play a role in cytokinesis, cell shape, and specialized functions such as secretion and capping.

组织特异性 In the kidney, expressed in the glomeruli. Also expressed in leukocytes.

疾病相关 Defects in MYH9 are the cause of May-Hegglin anomaly (MHA) [MIM:155100]. MHA is an autosomal dominant macrothrombocytopenia characterized by thrombocytopenia, giant platelets and leukokyte inclusions appearing as highly parallel paracrystalline bodies.
Defects in MYH9 are the cause of Sebastian syndrome (SBS) [MIM:605249]. SBS is an autosomal dominant macrothrombocytopenia characterized by thrombocytopenia, giant platelets and leukocyte inclusions that are smaller and less organized than in May-Hegglin anomaly.
Defects in MYH9 are the cause of Fechtner syndrome (FTNS) [MIM:153640]. FTNS is an autosomal dominant macrothrombocytopenia characterized by thrombocytopenia, giant platelets and leukocyte inclusions that are small and poorly organized. Additionally, FTNS is distinguished by Alport-like clinical features of sensorineural deafness, cataracts and nephritis.
Defects in MYH9 are the cause of Alport syndrome with macrothrombocytopenia (APSM) [MIM:153650]. APSM is an autosomal dominant disorder characterized by the association of ocular lesions, sensorineural hearing loss and nephritis (Alport syndrome) with platelet defects.
Defects in MYH9 are the cause of Epstein syndrome (EPS) [MIM:153650]. EPS is an autosomal dominant disorder characterized by the association of macrothrombocytopathy, sensorineural hearing loss and nephritis.
Defects in MYH9 are the cause of deafness autosomal dominant type 17 (DFNA17) [MIM:603622]. DFNA17 is a form of sensorineural hearing loss. Sensorineural deafness results from damage to the neural receptors of the inner ear, the nerve pathways to the brain, or the area of the brain that receives sound information. DFNA17 is characterized by progressive hearing impairment and cochleosaccular degeneration.
Defects in MYH9 are the cause of macrothrombocytopenia with progressive sensorineural deafness (MPSD) [MIM:600208]. MPSD is an autosomal dominant disorder characterized by the association of macrothrombocytopathy and progressive sensorineural hearing loss without renal dysfunction.
Note=Subjects with mutations in the motor domain of MYH9 present with severe thrombocytopenia and develop nephritis and deafness before the age of 40 years, while those

with mutations in the tail domain have a much lower risk of noncongenital complications and significantly higher platelet counts. The clinical course of patients with mutations in the four most frequently affected residues of MYH9 (responsible for 70% of MYH9-related cases) were evaluated. Mutations at residue 1933 do not induce kidney damage or cataracts and cause deafness only in the elderly, those in position 702 result in severe thrombocytopenia and produce nephritis and deafness at a juvenile age, while alterations at residue 1424 or 1841 result in intermediate clinical pictures.
Note=Genetic variations in MYH9 are associated with non-diabetic end stage renal disease (ESRD).

序列相似性

Contains 1 IQ domain.
Contains 1 myosin head-like domain.

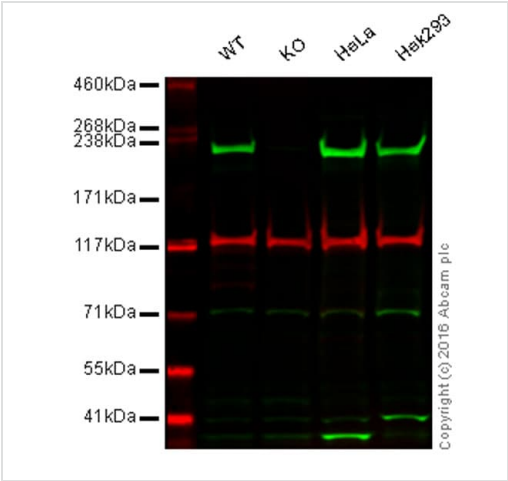
结构域

The rodlike tail sequence is highly repetitive, showing cycles of a 28-residue repeat pattern composed of 4 heptapeptides, characteristic for alpha-helical coiled coils.

翻译后修饰

ISGylated.

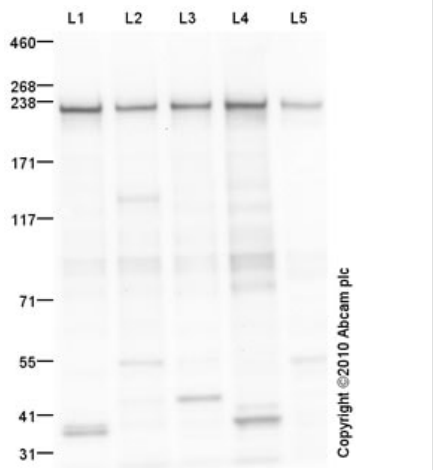
图片



Western blot - Anti-non-muscle Myosin IIA antibody (ab75590)

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: non-muscle Myosin IIA knockout HAP1 cell lysate (20 µg)
Lane 3: HeLa cell lysate (20 µg)
Lane 4: HEK-293 cell lysate (20 µg)
Lanes 1 - 4: Merged signal (red and green). Green - ab75590 observed at 230 kDa. Red - loading control, **ab18058**, observed at 124 kDa.

ab75590 was shown to recognize non-muscle Myosin IIA in wild-type HAP1 cells along with additonal cross-reactive bands. No band was observed when non-muscle Myosin IIA knockout samples examined. Wild-type and non-muscle Myosin IIA knockout samples were subjected to SDS-PAGE. ab75590 at a concentration of 1 µg/ml and **ab18058** (loading control to Vinculin) at a dilution of 1/1,000 were incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-non-muscle Myosin IIA antibody (ab75590)

All lanes : Anti-non-muscle Myosin IIA antibody (ab75590) at 1 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) whole cell lysate
Lane 2 : HL-60 (Human promyelocytic leukemia cell line) whole cell lysate
Lane 3 : Jurkat (Human T cell lymphoblast-like cell line) whole cell lysate
Lane 4 : HEK-293 (Human embryonic kidney cell line) whole cell lysate
Lane 5 : Human kidney tissue lysate - total protein (**ab30203**)

Lysates/proteins at 10 µg per lane.

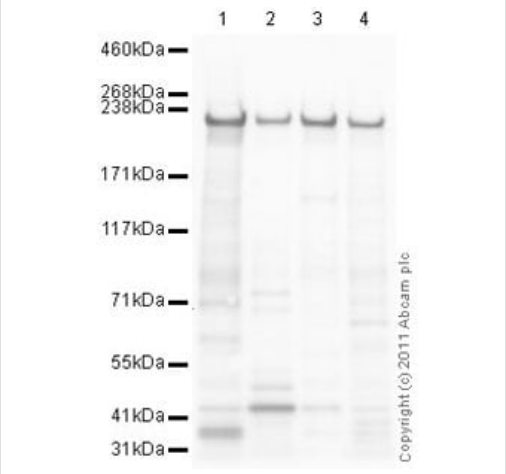
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 227 kDa
Observed band size: 227 kDa
Additional bands at: 100 kDa, 35 kDa, 45 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 30 seconds



Western blot - Anti-non-muscle Myosin IIA antibody (ab75590)

All lanes : Anti-non-muscle Myosin IIA antibody (ab75590) at 1 µg/ml

Lane 1 : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate
Lane 2 : Mouse kidney tissue lysate
Lane 3 : Mouse lung tissue lysate
Lane 4 : PC-12 (Rat adrenal pheochromocytoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 227 kDa
Observed band size: 227 kDa
Additional bands at: 35 kDa, 43 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 1 minute

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