abcam

Product datasheet

Anti-Eg5 antibody [mAbcam 51976] ab51976

★★★☆☆ 3 Abreviews 7 References 3 图像

概述

产**品名称** Anti-Eg5抗体[mAbcam 51976]

宿主 Mouse

经测试应用 适用于: ICC/IF, WB, IP

种属反应性 与反应: Human

免疫原 Synthetic peptide corresponding to Human Eg5 aa 950-1050 conjugated to keyhole limpet

haemocyanin.

(Peptide available as ab38094)

阳性对照 This antibody gave a positive signal in the following whole cell lysates: HEK293, Jurkat and A431.

常规说明

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

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 Constituents: PBS, 6.97% L-Arginine

纯度 lgG fraction 克隆 单克隆

克隆编号 mAbcam 51976

1

骨髓瘤 Sp2/0

同种型 lgG1

应用

The Abpromise guarantee Abpromise™承诺保证使用ab51976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
ICC/IF	★★★★ <u>(2)</u>	Use a concentration of 1 µg/ml.
WB	★ ★ ★ ★ (1)	Use a concentration of 5 µg/ml. Detects a band of approximately 120 kDa (predicted molecular weight: 120 kDa).
IP		Use at an assay dependent concentration.

靶标

功能

Motor protein required for establishing a bipolar spindle. Blocking of KIF11 prevents centrosome migration and arrest cells in mitosis with monoastral microtubule arrays.

疾病相关

Defects in KIF11 are the cause of microcephaly with or without chorioretinopathy, lymphedema, or mental retardation (MCLMR) [MIM:152950]. An autosomal dominant disorder that involves an overlapping but variable spectrum of central nervous system and ocular developmental anomalies. Microcephaly ranges from mild to severe and is often associated with mild to moderate developmental delay and a characteristic facial phenotype with upslanting palpebral fissures, broad nose with rounded tip, long philtrum with thin upper lip, prominent chin, and prominent ears. Chorioretinopathy is the most common eye abnormality, but retinal folds, microphthalmia, and myopic and hypermetropic astigmatism have also been reported, and some individuals have no overt ocular phenotype. Congenital lymphedema, when present, is typically confined to the dorsa of the feet, and lymphoscintigraphy reveals the absence of radioactive isotope uptake from the webspaces between the toes.

序列相似性

Belongs to the kinesin-like protein family. BimC subfamily.

Contains 1 kinesin-motor domain.

翻译后修饰

Phosphorylated exclusively on serine during S phase, but on both serine and Thr-926 during mitosis, so controlling the association of KIF11 with the spindle apparatus (probably during early prophase). Phosphorylated upon DNA damage, probably by ATM or ATR.

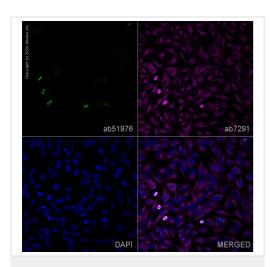
A subset of this protein primarily localized at the spindle pole is phosphorylated by NEK6 during

 $\label{eq:mitosis} \mbox{mitosis; phosphorylation is required for mitotic function.}$

细胞定位

Cytoplasm. Cytoplasm > cytoskeleton > spindle pole.

图片



Immunocytochemistry/ Immunofluorescence - Anti-Eg5 antibody [mAbcam 51976] (ab51976)



Western blot - Anti-Eg5 antibody [mAbcam 51976] (ab51976)

ab51976 staining Eg5 in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab51976 at 5µg/ml and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with ab150081, Goat polyclonal Secondary Antibody to Rabbit lgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and ab150120, Goat polyclonal Secondary Antibody to Mouse lgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour magenta). Nuclear DNA was labelled with DAPI (shown in blue). Also suitable in cells fixed with 4% paraformaldehyde (10 min).lmage was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.

All lanes : Anti-Eg5 antibody [mAbcam 51976] (ab51976) at 5 μ g/ml

Lane 1: HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lane 2 : A431 (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 3 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

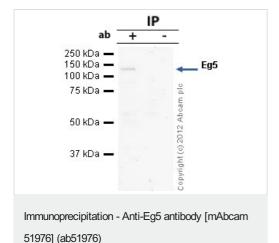
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Rabbit polyclonal to Mouse IgG - H&L (HRP) at 1/2000 dilution

Performed under reducing conditions.

Predicted band size: 120 kDa **Observed band size:** 120 kDa



Eg5 was immunoprecipitated using 0.5mg Jurkat whole cell extract, 5µg of Mouse monoclonal to Eg5 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, Jurkat 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 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab51976.

Secondary: Goat polyclonal to mouse $\lg G$ light chain specific (HRP)

at 1/5000 dilution. Band: 120kDa: Eg5

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