# abcam

## Product datasheet

## Anti-HEF1/NEDD-9 antibody ab88584

1 References 3 图像

概述

产品名称 Anti-HEF1/NEDD-9抗体

描述 小鼠多克隆抗体to HEF1/NEDD-9

**宿主** Mouse

经测试应用 适用于: WB, ICC/IF

种属反应性 与反应: Human

免疫原 Recombinant full length protein within Human HEF1/NEDD-9. The exact immunogen sequence

used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific

Support team to discuss your requirements.

**阳性**对照 293 cell lysate, HEF1/NEDD-9 transfected 293T lysate, 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. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

**存储溶液** pH: 7.40

Constituent: 100% PBS

纯**度** Protein A purified

**克隆** 多克隆

**同种型** lgG

应用

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## The Abpromise guarantee

#### Abpromise™承诺保证使用ab88584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 <b>用</b>	Ab评论	说明
WB		Use a concentration of 1 - 5 µg/ml. Predicted molecular weight: 93 kDa.
ICC/IF		Use a concentration of 10 µg/ml.

#### 靶标

#### 功能

Docking protein which plays a central coordinating role for tyrosine-kinase-based signaling related to cell adhesion. May function in transmitting growth control signals between focal adhesions at the cell periphery and the mitotic spindle in response to adhesion or growth factor signals initiating cell proliferation. May play an important role in integrin beta-1 or B cell antigen receptor (BCR) mediated signaling in B- and T-cells. Integrin beta-1 stimulation leads to recruitment of various proteins including CRK, NCK and SHPTP2 to the tyrosine phosphorylated form.

#### 组织特异性

Widely expressed. Higher levels detected in kidney, lung, and placenta. Also detected in T-cells, B-cells and diverse cell lines. The protein has been detected in lymphocytes, in diverse cell lines, and in lung tissues.

#### 序列相似性

Belongs to the CAS family. Contains 1 SH3 domain.

### 结构域

Contains a central domain containing multiple potential SH2-binding sites and a C-terminal domain containing a divergent helix-loop-helix (HLH) motif. The SH2-binding sites putatively bind CRK, NCK and ABL SH2 domains. The HLH motif confers specific interaction with the HLH proteins ID2, E12 and E47. It is absolutely required for the induction of pseudohyphal growth in yeast and mediates homodimerization and heterodimerization with p130cas.

The SH3 domain interacts with two proline-rich regions of focal adhesion kinase.

## 翻译后修饰

Cell cycle-regulated processing produces four isoforms: p115, p105, p65, and p55. Isoform p115 arises from p105 phosphorylation and appears later in the cell cycle. Isoform p55 arises from p105 as a result of cleavage at a caspase cleavage-related site and it appears specifically at mitosis. The p65 isoform is poorly detected.

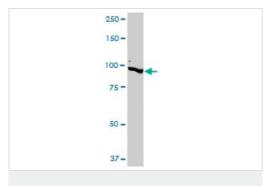
Focal adhesion kinase 1 phosphorylates the protein at the YDYVHL motif (conserved among all cas proteins). The SRC family kinases (FYN, SRC, LCK and CRK) are recruited to the phosphorylated sites and can phosphorylate other tyrosine residues. Ligation of either integrin beta-1 or B-cell antigen receptor on tonsillar B-cells and B-cell lines promotes tyrosine phosphorylation and both integrin and BCR-mediated tyrosine phosphorylation requires an intact actin network. In fibroblasts transformation with oncogene v-ABL results in an increase in tyrosine phosphorylation. Transiently phosphorylated following CD3 cross-linking and this phosphorylated form binds to CRK and C3G. A mutant lacking the SH3 domain is phosphorylated upon CD3 cross-linking but not upon integrin beta-1 cross-linking. Tyrosine phosphorylation occurs upon stimulation of the G-protein coupled C1a calcitonin receptor in rabbit. Calcitonin-stimulated tyrosine phosphorylation is mediated by calcium- and protein kinase C-dependent mechanisms and requires the integrity of the actin cytoskeleton.

#### 细胞定位

Cytoplasm > cytoskeleton > spindle and Cytoplasm > cell cortex. Nucleus. Golgi apparatus. Cell projection > lamellipodium. Cytoplasm. Cell junction > focal adhesion. Localizes to both the cell nucleus and the cell periphery and is differently localized in fibroblasts and epithelial cells. In

fibroblasts is predominantly nuclear and in some cells is present in the Golgi apparatus. In epithelial cells localized predominantly in the cell periphery with particular concentration in lamellipodia but is also found in the nucleus. Isoforms p105 and p115 are predominantly cytoplasmic and associate with focal adhesions while p55 associates with mitotic spindle.

## 图片



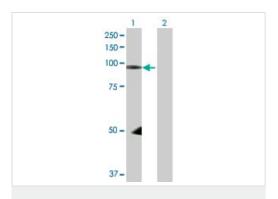
Western blot - Anti-HEF1/NEDD-9 antibody (ab88584)

Anti-HEF1/NEDD-9 antibody (ab88584) at 1  $\mu$ g/ml + 293 cell lysate at 50  $\mu$ g

## Secondary

Goat anti-Mouse IgG (H+L) HRP at 1/5000 dilution

**Predicted band size:** 93 kDa **Observed band size:** 93 kDa



Western blot - Anti-HEF1/NEDD-9 antibody (ab88584)

All lanes: Anti-HEF1/NEDD-9 antibody (ab88584) at 1 μg/ml

Lane 1: HEF1 transfected 293T cell lysate

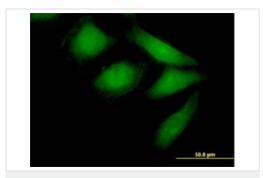
Lane 2: Non-transfected lysate

Lysates/proteins at 25 µg per lane.

#### **Secondary**

All lanes: Goat anti-Mouse IgG (H+L) HRP at 1/5000 dilution

**Predicted band size:** 93 kDa **Observed band size:** 93 kDa



Immunocytochemistry/ Immunofluorescence - Anti-HEF1/NEDD-9 antibody (ab88584) ab88584 at 10 $\mu$ g/ml staining HEF1/NEDD-9 in HeLa cells by Immunofluorescence.

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If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

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