

### Anti-VASP antibody [OTI1H8] ab114029

#### 4 图像

#### 概述

|       |  |
|-------|--|
| 产品名称  | Anti-VASP抗体[OTI1H8]  |
| 描述    | 小鼠单克隆抗体[OTI1H8] to VASP  |
| 宿主    | Mouse  |
| 经测试应用 | 适用于: Flow Cyt (Intra), WB, ICC/IF  |
| 种属反应性 | 与反应: Human, African green monkey   |
| 免疫原   | Recombinant full length protein corresponding to Human VASP aa 1 to the C-terminus. Produced in HEK-293T cells. NP_003361<br>Database link: <a href="#">P50552</a> |

 [Run BLAST with](#)

 [Run BLAST with](#)

|      |  |
|------|--|
| 阳性对照 | WB: HEK-293T cell lysate transfected with pCMV6-ENTRY VASP cDNA; HepG2, HeLa, MCF7, HT-29 and A549 cell extracts; ICC/IF: COS-7 cells transiently transfected by pCMV6-ENTRY VASP; Flow Cyt (Intra): HEK-293T cells transfected with pCMV6-ENTRY VASP overexpress plasmid. |
|------|--|

|      |   |
|------|---|
| 常规说明 | The clone number has been updated from 1H8 to OTI1H8, both clone numbers name the same clone. |
|------|---|

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. Avoid freeze / thaw cycle. |
| 存储溶液 | pH: 7.30<br>Preservative: 0.02% Sodium azide<br>Constituents: PBS, 1% BSA, 50% Glycerol                                 |

|      |   |
|------|---|
| 纯度   | Affinity purified   |
| 纯化说明 | Purified from cell culture supernatant by affinity chromatography |
| 克隆   | 单克隆   |
| 克隆编号 | OT11H8  |
| 同种型  | IgG1  |

## 应用

**The Abpromise guarantee**      **Abpromise™**承诺保证使用ab114029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   |
|------------------|------|--|
| Flow Cyt (Intra) |      | 1/100.<br><b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody. |
| WB               |      | 1/500 - 1/2000. Predicted molecular weight: 40 kDa.  |
| ICC/IF           |      | 1/100.   |

## 靶标

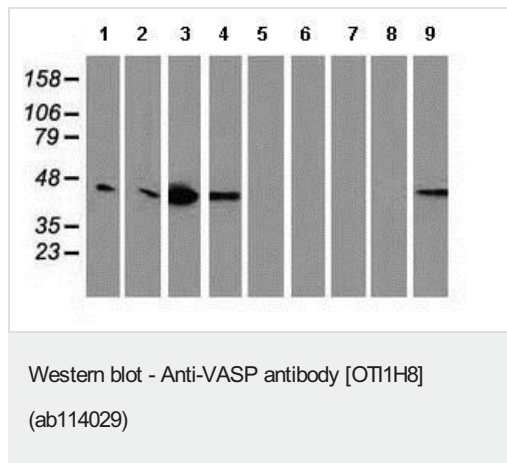
|       |   |
|-------|---|
| 功能    | Ena/VASP proteins are actin-associated proteins involved in a range of processes dependent on cytoskeleton remodeling and cell polarity such as axon guidance, lamellipodial and filopodial dynamics, platelet activation and cell migration. VASP promotes actin filament elongation. It protects the barbed end of growing actin filaments against capping and increases the rate of actin polymerization in the presence of capping protein. VASP stimulates actin filament elongation by promoting the transfer of profilin-bound actin monomers onto the barbed end of growing actin filaments. Plays a role in actin-based mobility of <i>Listeria monocytogenes</i> in host cells. Regulates actin dynamics in platelets and plays an important role in regulating platelet aggregation. |
| 组织特异性 | Highly expressed in platelets.  |
| 序列相似性 | Belongs to the Ena/VASP family.<br>Contains 1 WH1 domain.   |
| 结构域   | The EVH2 domain is comprised of 3 regions. Block A is a thymosin-like domain required for G-actin binding. The KLKR motif within this block is essential for the G-actin binding and for actin polymerization. Block B is required for F-actin binding and subcellular location, and Block C for tetramerization.<br>The WH1 domain mediates interaction with XIRP1.  |
| 翻译后修饰 | Major substrate for cAMP-dependent (PKA) and cGMP-dependent protein kinase (PKG) in platelets. The preferred site for PKA is Ser-157, the preferred site for PKG, Ser-239. In ADP-activated platelets, phosphorylation by PKA or PKG on Ser-157 leads to fibrinogen receptor inhibition. Phosphorylation on Thr-278 requires prior phosphorylation on Ser-157 and Ser-239. In response to phorbol ester (PMA) stimulation, phosphorylated by PKC/PRKCA. In response to thrombin, phosphorylated by both PKC and ROCK1. Phosphorylation at Thr-278 by AMPK does not require prior phosphorylation at Ser-157 or Ser-239. Phosphorylation modulates F-actin binding, actin filament elongation and platelet activation. Carbon monoxide (CO) promotes   |

phosphorylation at Ser-157, while nitric oxide (NO) promotes phosphorylation at Ser-157, but also at Ser-239. Response to NO and CO is blunted in platelets from diabetic patients, and VASP is not phosphorylated efficiently at Ser-157 and Ser-239.

## 细胞定位

Cytoplasm. Cytoplasm > cytoskeleton. Cell junction > focal adhesion. Cell projection > lamellipodium membrane. Cell projection > filopodium membrane. Targeted to stress fibers and focal adhesions through interaction with a number of proteins including MRL family members. Localizes to the plasma membrane in protruding lamellipodia and filopodial tips. Stimulation by thrombin or PMA, also translocates VASP to focal adhesions. Localized along the sides of actin filaments throughout the peripheral cytoplasm under basal conditions.

## 图片



**All lanes :** Anti-VASP antibody [OT11H8] (ab114029) at 1/500 dilution

**Lane 1 :** HepG2 (Human liver hepatocellular carcinoma cell line) cell extract

**Lane 2 :** HeLa (Human epithelial cell line from cervix adenocarcinoma) cell extract

**Lane 3 :** HT-29 (Human colorectal adenocarcinoma cell line) cell extract

**Lane 4 :** A549 (Human lung carcinoma cell line) cell extract

**Lane 5 :** COS-7 (African green monkey kidney fibroblast-like cell line) cell extract

**Lane 6 :** Jurkat (Human T cell leukemia cell line from peripheral blood) cell extract

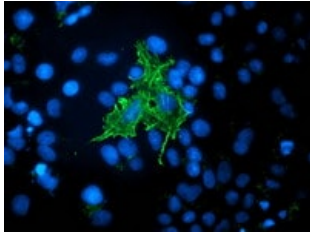
**Lane 7 :** MDCK (Canine kidney cell line) cell extract

**Lane 8 :** PC-12 (Rat adrenal gland pheochromocytoma cell line) cell extract

**Lane 9 :** MCF7 (Human breast adenocarcinoma cell line) cell extract

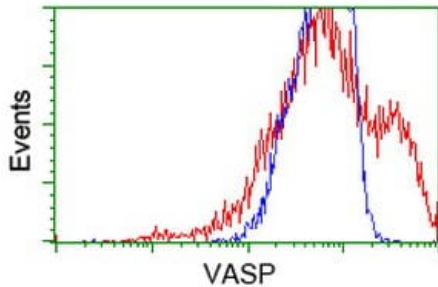
Lysates/proteins at 35 µg per lane.

**Predicted band size:** 40 kDa



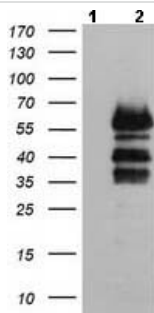
Immunocytochemistry/ Immunofluorescence - Anti-VASP antibody [OT11H8] (ab114029)

ab114029 at 1/100 dilution staining VASP in COS-7 (African green monkey kidney fibroblast-like cell line) cells transiently transfected with pCMV6-ENTRY VASP by Immunofluorescence.



Flow Cytometry (Intracellular) - Anti-VASP antibody [OT11H8] (ab114029)

ab114029 at 1/100 dilution staining VASP in HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) cells transfected with either pCMV6-ENTRY VASP overexpress plasmid (Red) or empty vector control plasmid (Blue) by Flow Cytometry (Intracellular).



Western blot - Anti-VASP antibody [OT11H8] (ab114029)

**All lanes :** Anti-VASP antibody [OT11H8] (ab114029) at 1/500 dilution

**Lane 1 :** HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) cell lysate transfected with pCMV6-ENTRY control cDNA

**Lane 2 :** HEK-293T cell lysate transfected with pCMV6-ENTRY VASP cDNA

Lysates/proteins at 5 µg per lane.

**Predicted band size:** 40 kDa

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