# abcam

## Product datasheet

## Anti-VASP (phospho S156) antibody [EPR1065(2)] ab109541

יעלאעבע RabMAb

1 References 画像数3

#### 製品の概要

免疫原

製品名 Anti-VASP (phospho S156) antibody [EPR1065(2)]

製品の詳細 Rabbit monoclonal [EPR1065(2)] to VASP (phospho S156)

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P

適用なし: Flow Cyt,ICC/IF or IP

種交差性 交差種: Human

交差が予測される動物種: Mouse

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール Human platelet cell lysate; Human kidney tissue.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this

species. Please contact us for more information.

#### 製品の特性

製品の状態

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

バッファー pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

精製度 Protein A purified

**ポリ/モノ** モノクローナル

**クローン名** EPR1065(2)

アイソタイプ IgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab109541の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/1000 - 1/10000. Predicted molecular weight: 40 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

追加情報

Is unsuitable for Flow Cyt,ICC/IF or IP.

#### ターゲット情報

機能

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 Listeria monocytogenes in host cells. Regulates actin dynamics in platelets and plays an important role in regulating platelet aggregation.

組織特異性

Highly expressed in platelets.

配列類似性

Belongs to the Ena/VASP family.

Contains 1 WH1 domain.

ドメイン

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.

The WH1 domain mediates interaction with XIRP1.

翻訳後修飾

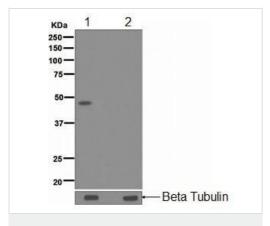
Major substrate for cAMP-dependent (PKA) and cGMP-dependent protein kinase (PKG) in platelets. The preferred site for PKA is Ser-157, the preferred site for PKG, Ser-239. In ADP-activated platelets, phosphorylation by PKA or PKG on Ser-157 leads to fibrinogen receptor inhibition. Phosphorylation on Thr-278 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.

細胞内局在

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.

### 画像



Western blot - Anti-VASP (phospho S156) antibody [EPR1065(2)] (ab109541) **All lanes :** Anti-VASP (phospho S156) antibody [EPR1065(2)] (ab109541) at 1/1000 dilution

Lane 1: Human platelet cell lysate, untreated

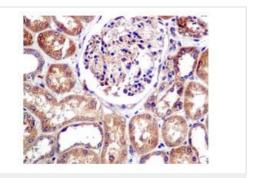
Lane 2: Human platelet cell lysate treated with Alkaline Phosphatase (AP)

Lysates/proteins at 10 µg per lane.

## Secondary

All lanes: HRP-labelled goat anti-rabbit at 1/2000 dilution

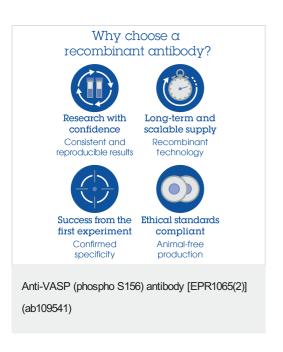
Predicted band size: 40 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-VASP (phospho S156) antibody [EPR1065(2)] (ab109541)

ab109541 at 1/100 dilution staining VASP (phospho S156) in paraffin-embedded Human kidney tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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