abcam

Product datasheet

Recombinant Human VASP protein ab105601

1 References 画像数 1

製品の詳細

製品名 Recombinant Human VASP protein

精製度 > 85 % SDS-PAGE.

ab105601 is purified using conventional chromatography techniques.

発現系 Escherichia coli

アクセッション番号 <u>P50552</u>

タンパク質長 Protein fragment

Animal free No

由来 Recombinant

生物種 Human

配列 MGSSHHHHHH SSGLVPRGSH MSETVICSSR

ATVMLYDDGN KRWLPAGTGP QAFSRVQIYH
NPTANSFRVV GRKMQPDQQV VINCAIVRGV
KYNQATPNFH QWRDARQVWG LNFGSKEDAA
QFAAGMASAL EALEGGGPPP PPALPTWSVP
NGPSPEEVEQ QKRQQPGPSE HIERRVSNAG
GPPAPPAGGP PPPPGPPPP GPPPPGLPP
SGVPAAAHGA GGGPPPAPPL PAAQGPGGG
AGAPGLAAAI AGAKLRKVSK QEEASGGPTA
PKAESGRSGG GGLMEEMNAM LARRRKATQV
GEKTPKDESA NQEEPEARVP AQSESVRRPW
EKNSTTLPRM KSSSSVTTSE TQPCTPSSSD YSD

予測される分子量 38 kDa including tags

領域 1 to 343

タヴ His tag N-Terminus

特性

Our Abpromise guarantee covers the use of ab105601 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション SDS-PAGE

Mass Spectrometry

質量分析 MALDI-TOF

1

前処理および保存

保存方法および安定性

Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

00.8:Ha

Constituents: 0.00174% PMSF, 0.077% DTT, 0.316% Tris HCl, 10% Glycerol (glycerin,

glycerine), 1.16% Sodium chloride

関連情報

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

配列類似性

Highly expressed in platelets.

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.

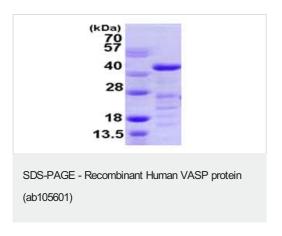
The WH1 domain mediates interaction with XIRP1.

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.



15% SDS-PAGE showing ab105601 (3 μ g) at approximately 37.5 kDa.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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 https://www.abcam.co.jp/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors