


## Product datasheet

### Anti-VAV2 antibody [EP1067Y] ab52640

KO **VALIDATED** Recombinant RabMAB

★★★★★ [3 Abreviews](#) [21 References](#) [7 Images](#)

#### Overview

<b>Product name</b>	Anti-VAV2 antibody [EP1067Y]
<b>Description</b>	Rabbit monoclonal [EP1067Y] to VAV2
<b>Host species</b>	Rabbit
<b>Specificity</b>	This antibody detects Vav2 phosphorylated on Tyr172 as well as unphosphorylated Vav2.
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IP, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rat 
<b>Immunogen</b>	Synthetic peptide within Human VAV2. The exact sequence is proprietary.
<b>Positive control</b>	WB: HeLa cells; HAP1 cells; HEK293 cells. IHC-P: Human cervical carcinoma. Flow Cyt (intra): HeLa cells. IP: HEK293 cells.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAB<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAB<sup>®</sup> patents</a>.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	<p>pH: 7.20</p> <p>Preservative: 0.05% Sodium azide</p> <p>Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

Clone number	EP1067Y
Isotype	IgG

## Applications

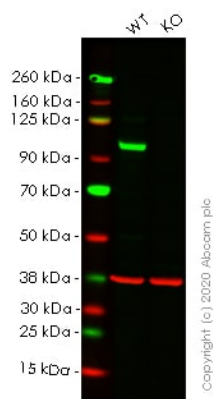
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab52640 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/2500.
WB	★★★★★ (3)	1/20000. Detects a band of approximately 101 kDa (predicted molecular weight: 101 kDa).
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## Target

<b>Function</b>	Guanine nucleotide exchange factor for the Rho family of Ras-related GTPases. Plays an important role in angiogenesis. Its recruitment by phosphorylated EPHA2 is critical for EFNA1-induced RAC1 GTPase activation and vascular endothelial cell migration and assembly.
<b>Tissue specificity</b>	Widely expressed.
<b>Sequence similarities</b>	Contains 1 CH (calponin-homology) domain. Contains 1 DH (DBL-homology) domain. Contains 1 PH domain. Contains 1 phorbol-ester/DAG-type zinc finger. Contains 1 SH2 domain. Contains 2 SH3 domains.

## Images



Western blot - Anti-VAV2 antibody [EP1067Y]  
(ab52640)

**All lanes :** Anti-VAV2 antibody [EP1067Y] (ab52640) at 1/20000 dilution

**Lane 1 :** Wild-type HeLa cell lysate

**Lane 2 :** VAV2 knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

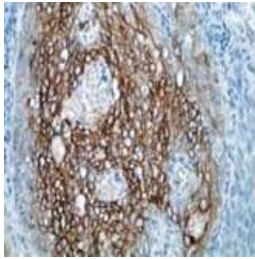
Performed under reducing conditions.

**Predicted band size:** 101 kDa

**Observed band size:** 100 kDa

**Lanes 1- 2:** Merged signal (red and green). Green - ab52640 observed at 100 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) observed at 37 kDa.

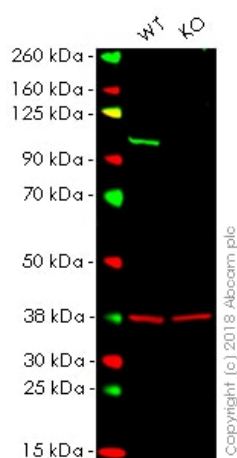
ab52640 was shown to react with VAV2 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line [ab265318](#) (knockout cell lysate [ab257794](#)) was used. Wild-type HeLa and VAV2 knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab52640 and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) overnight at 4°C at a 1 in 20000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VAV2 antibody [EP1067Y] (ab52640)

Human cervical carcinoma stained with ab52640 at 1/50 - 1/100 dilution

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



Western blot - Anti-VAV2 antibody [EP1067Y] (ab52640)

**All lanes :** Anti-VAV2 antibody [EP1067Y] (ab52640) at 1/20000 dilution

**Lane 1 :** Wild-type HAP1 whole cell lysate

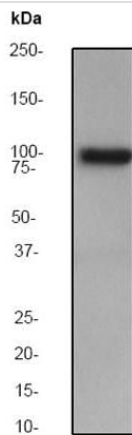
**Lane 2 :** VAV2 knockout HAP1 whole cell lysate

Lysates/proteins at 20 µg per lane.

**Predicted band size:** 101 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab52640 observed at 101 kDa. Red - loading control, [ab9484](#), observed at 37 kDa.

ab52640 was shown to specifically react with VAV2 in wild-type HAP1 cells as signal was lost in VAV2 knockout cells. Wild-type and VAV2 knockout samples were subjected to SDS-PAGE. Ab52640 and [ab9484](#) (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/20000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed [ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed [ab216776](#) secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-VAV2 antibody [EP1067Y] (ab52640)

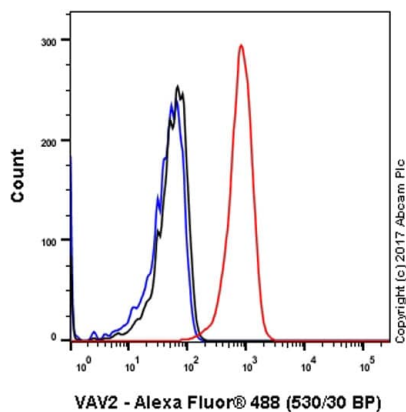
Anti-VAV2 antibody [EP1067Y] (ab52640) at 1/20000 dilution + 293 cell lysate at 10 µg

### Secondary

Goat anti-rabbit HRP labeled at 1/2000 dilution

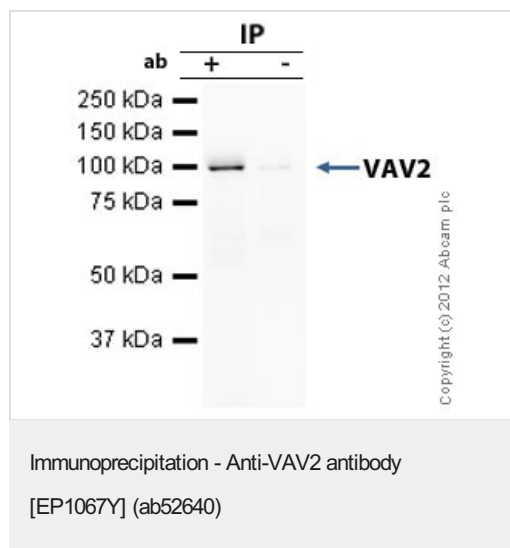
**Predicted band size:** 101 kDa

**Observed band size:** 101 kDa



Flow Cytometry (Intracellular) - Anti-VAV2 antibody [EP1067Y] (ab52640)

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling VAV2 (red) with ab52640 at a 1/2500 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A goat anti-rabbit IgG (Alexa Fluor® 488) ([ab150077](#)) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal IgG ([ab172730](#)). Blue (unlabeled control) - Cells without incubation with the primary and secondary antibodies.



VAV2 was immunoprecipitated using 0.5mg Hek293 whole cell extract, 10µg of Rabbit monoclonal to VAV2 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, Hek293 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 ab52640.

Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) ([ab99697](#)).

Band: 100kDa; VAV2.

Why choose a recombinant antibody?

**Research with confidence**  
Consistent and reproducible results

**Long-term and scalable supply**  
Recombinant technology

**Success from the first experiment**  
Confirmed specificity

**Ethical standards compliant**  
Animal-free production

Anti-VAV2 antibody [EP1067Y] (ab52640)

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

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