abcam

Product datasheet

Anti-VAMP2 antibody [EPR12790] - BSA and Azide free ab214590

Recombinant RabMAb

1 References 11 Images

Overview

Product name	Anti-VAMP2 antibody [EPR12790] - BSA and Azide free
Description	Rabbit monoclonal [EPR12790] to VAMP2 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IP, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human fetal brain and Human cerebellum lysates ICC/IF: SH-SY5Y cells. Flow Cyt (intra): Jurkat cells.
General notes	ab214590 is the carrier-free version of **ab181869**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. 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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR12790
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab214590 in the following tested applications.

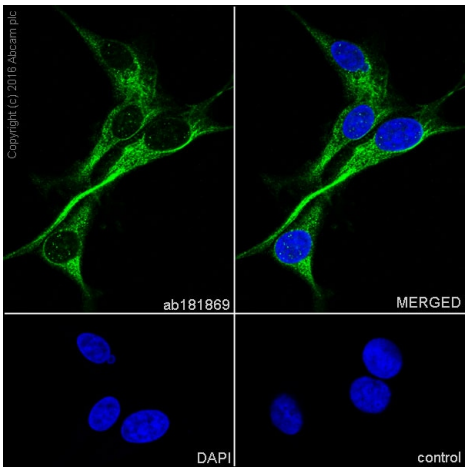
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration. **ab199376** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Detects a band of approximately 18 kDa (predicted molecular weight: 13 kDa).
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

Target

Function	Involved in the targeting and/or fusion of transport vesicles to their target membrane.
Tissue specificity	Nervous system and skeletal muscle.
Sequence similarities	Belongs to the synaptobrevin family. Contains 1 v-SNARE coiled-coil homology domain.
Cellular localization	Cytoplasmic vesicle > secretory vesicle > synaptic vesicle membrane. Cell junction > synapse > synaptosome. Neuronal synaptic vesicles.

Images

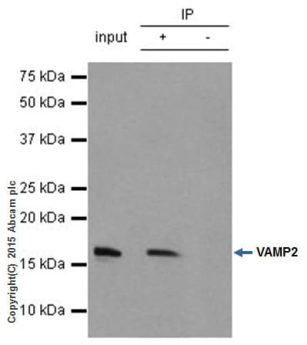


Immunocytochemistry/ Immunofluorescence - Anti-VAMP2 antibody [EPR12790] - BSA and Azide free (ab214590)

ab181869 staining VAMP2 in U87-MG (human glioblastoma) cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 100% methanol. Samples were incubated with primary antibody at a dilution of 1/500. A goat anti rabbit IgG (Alexa Fluor® 488) (**ab150077**) was used as the secondary antibody at a dilution of 1/1000. DAPI was used as a nuclear counterstain.

Negative control 1:PBS only.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181869**).



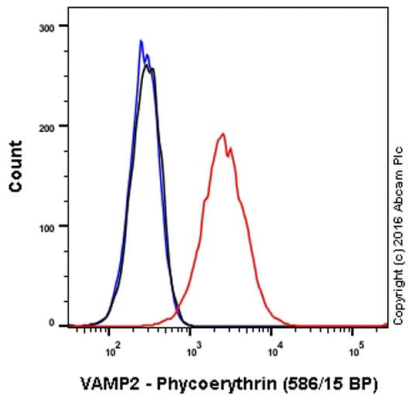
Immunoprecipitation - Anti-VAMP2 antibody [EPR12790] - BSA and Azide free (ab214590)

ab181869 (purified) at 1/150 immunoprecipitating VAMP2 in Human cerebellum whole cell lysate. 10 ug of cell lysate was present in the input. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10,000 dilution. A rabbit monoclonal IgG (**ab172730**) was used intead of **ab128913** as a negative control (Lane 3).

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181869**).



Flow Cytometry (Intracellular) - Anti-VAMP2 antibody [EPR12790] - BSA and Azide free (ab214590)

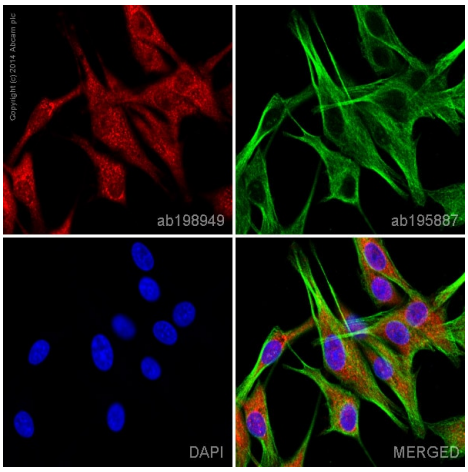
Clone EPR12790 (ab214590) has been successfully conjugated by Abcam. This image was generated using Anti-VAMP2 antibody [EPR12790] (PE). Please refer to **ab214529** for protocol details.

Overlay histogram showing U-87MG cells stained with **ab214529** (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (**ab214529**, 1/2500 dilution) for 30 min at 22°C.

Isotype control antibody (black line) was Rabbit IgG (monoclonal) Phycoerythrin (**ab209478**) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 50mW Yellow/Green laser (561nm) and 586/15 bandpass filter.

This antibody gave a positive signal in U-87MG cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Triton X-100 for 15 min used under the same conditions.

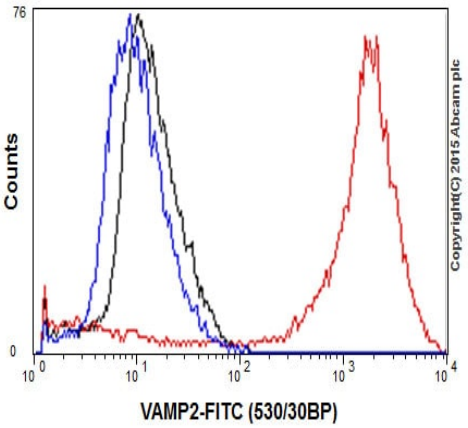


Immunocytochemistry/ Immunofluorescence - Anti-VAMP2 antibody [EPR12790] - BSA and Azide free (ab214590)

Clone EPR12790 (ab214590) has been successfully conjugated by Abcam. This image was generated using Anti-VAMP2 antibody [EPR12790] (Alexa Fluor® 647). Please refer to **ab198949** for protocol details.

ab198949 staining VAMP2 in U87MG cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with **ab198949** at a 1/100 dilution (shown in red) and **ab195887**, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at a 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

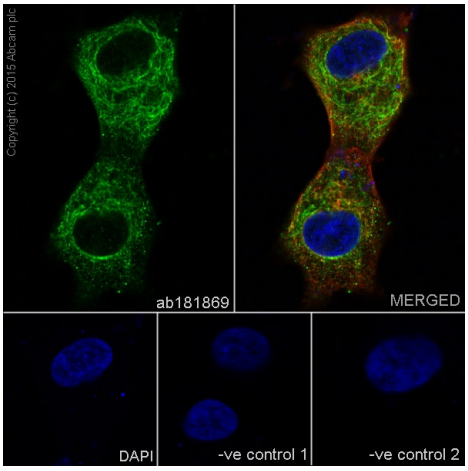
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Flow Cytometry (Intracellular) - Anti-VAMP2 antibody [EPR12790] - BSA and Azide free (ab214590)

Intracellular Flow Cytometry analysis of SH-SY5Y cells labelling VAMP2 with purified **ab181869** at 1/100 (red). Cells were fixed with 4% paraformaldehyde. A FITC-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181869**).



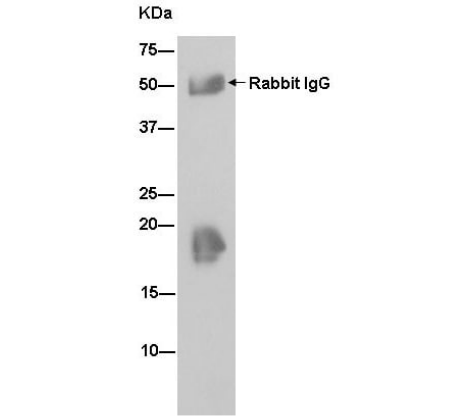
Immunocytochemistry/ Immunofluorescence - Anti-VAMP2 antibody [EPR12790] - BSA and Azide free (ab214590)

Immunocytochemistry/Immunofluorescence analysis of U87-MG (human glioblastoma) cells labelling VAMP2 with purified **ab181869** at 1/250. Cells were fixed with 100% methanol and permeabilized with 0.1% Triton X-100. **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. **ab7291**, a mouse anti-tubulin (1/1000) and **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000) were also used.

Control 1: primary antibody (1/100) and secondary antibody, **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/500).

Control 2: **ab7291** (1/1000) and secondary antibody, **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/500).

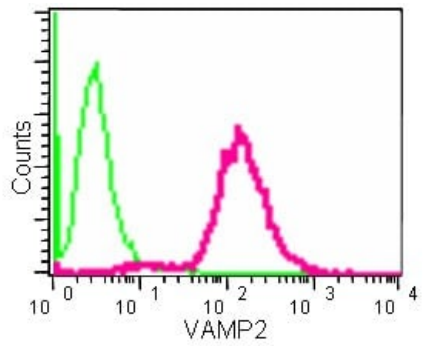
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181869**).



Immunoprecipitation - Anti-VAMP2 antibody [EPR12790] - BSA and Azide free (ab214590)

Western blot analysis of immunoprecipitation pellet from Human cerebellum lysate immunoprecipitated using **ab181869** at 1/70 dilution.
Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution.

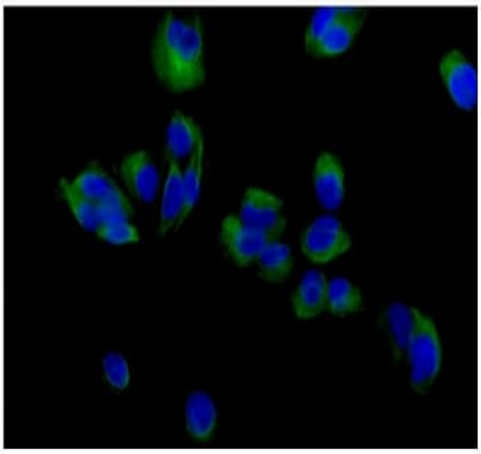
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181869**).



Flow Cytometry (Intracellular) - Anti-VAMP2 antibody [EPR12790] - BSA and Azide free (ab214590)

Intracellular Flow Cytometry analysis of Jurkat cells fixed with 2% paraformaldehyde labeling VAMP2 with unpurified **ab181869** at 1/150 dilution followed by Goat anti rabbit IgG (FITC) at 1/150 dilution. Rabbit monoclonal IgG was used as an isotype control.

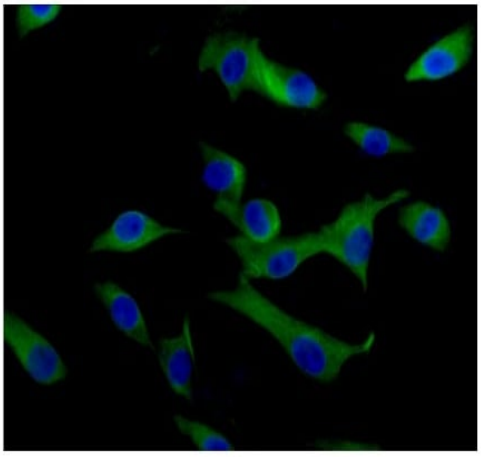
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181869**).



Immunocytochemistry/ Immunofluorescence - Anti-VAMP2 antibody [EPR12790] - BSA and Azide free (ab214590)

Immunofluorescent analysis of SH-SYSY cells (4% paraformaldehyde-fixed) labeling VAMP2 with unpurified **ab181869** at 1/500 dilution followed by Goat anti rabbit IgG (Alexa Fluor®488) at 1/200 dilution and counterstained with DAPI.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181869**).



Immunocytochemistry/ Immunofluorescence - Anti-VAMP2 antibody [EPR12790] - BSA and Azide free (ab214590)

Immunofluorescent analysis of U87-MG cells (4% paraformaldehyde-fixed) labeling VAMP2 with **ab181869** at 1/500 dilution followed by Goat anti rabbit IgG (Alexa Fluor®488) at 1/200 dilution and counterstained with Dapi.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab181869**).

Anti-VAMP2 antibody [EPR12790] - BSA and Azide free (ab214590)

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