VAMP4 Polyclonal Antibody

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse, Rat
Published Species	Rat, Mouse
Host/Isotope	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Recombinant rat VAMP-4 protein.
Form	Liquid
Concentration	1 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS with 1mg/mL BSA
Contains	0.05% sodium azide
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2212790

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC)	2 µg/mL	2 Publications
Immunofluorescence (IF)	10 µg/mL	1 Publication
Immunohistochemistry (IHC)	1:100	1 Publication
Western Blot (WB)	2 µg/mL	1 Publication

Product Specific Information

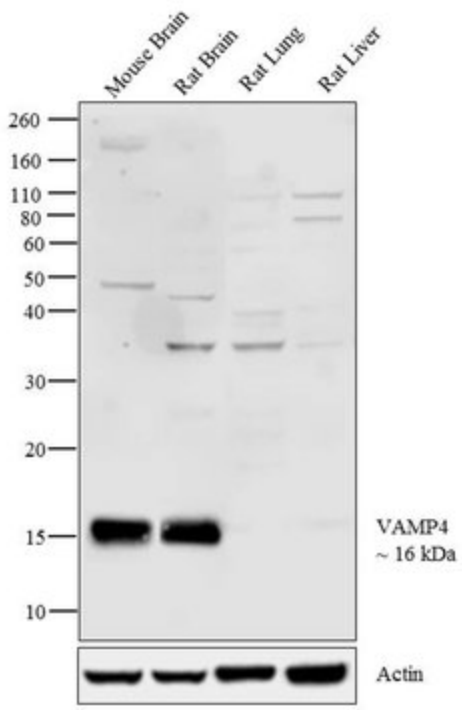
PA1-768 detects VAMP-4 from human and mouse samples.

PA1-768 has been successfully used in Western blot and immunofluorescence procedures. By Western blot, this antibody detects an ~18 kDa protein representing VAMP-4 from PC3 cell extract. Immunofluorescent staining of VAMP-4 in CV-1 cells using PA1-768 results in a staining pattern consistent with VAMP-4 staining.

Immunofluorescence staining with this antibody requires saponin permeabilization.

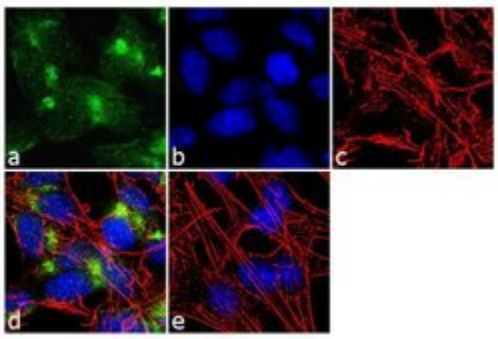
The PA1-768 antigen is recombinant rat VAMP-4.

Advanced Verification Data

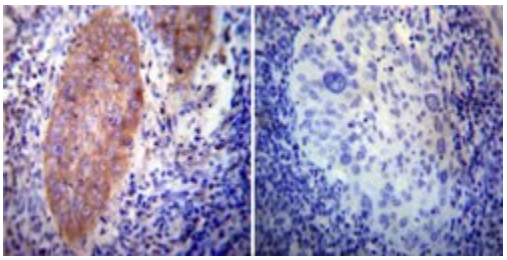


VAMP4 Antibody (PA1-768)
Antibody specificity was demonstrated by detection of differential basal expression of the target across tissue models owing to their inherent genetic constitution. Relative expression of VAMP4 was observed in Mouse Brain, Rat Brain, Rat Lung and Rat Liver in Western Blot using VAMP4 Polyclonal Antibody (Product # PA1-768). VAMP4 is reported to be expressed in brain tissue and not in other tissues like lung and liver. Relative expression validation info.

Product Images For VAMP4 Polyclonal Antibody



VAMP4 Antibody (PA1-768) in IF
Immunofluorescence analysis of VAMP4 was performed using 70% confluent log phase SH-SY5Y cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 2% BSA for 1 hour at room temperature. The cells were labeled with VAMP4 Rabbit Polyclonal Antibody (Product # PA1-768) at 2 µg/mL in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034) a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor® 555 Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing cytoplasmic localization. Panel e shows the no primary antibody control. The images were captured at 60X magnification.



VAMP4 Antibody (PA1-768) in IHC
Immunohistochemistry was performed on cancer biopsies of deparaffinized human Cervical carcinoma tissue. To expose target proteins, heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer, microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1:200 with a rabbit polyclonal antibody recognizing VAMP4 (Product # PA1-768) or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP, followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.

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5 References

Immunofluorescence (1)

Molecular biology of the cell

Control of insulin granule formation and function by the ABC transporters ABCG1 and ABCA1 and by oxysterol binding protein OSBP.

"PA1-768 was used in Immunohistochemistry-immunofluorescence to study the role of cholesterol in supporting granule membrane formation and function."

Authors: Hussain SS,Harris MT,Kreutzberger AJB,Inouye CM,Doyle CA,Castle AM,Arvan P,Castle JD

Species
Rat

Dilution
Not Cited

Year
2018

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Species
Rat

Dilution
Not Cited

Year
2018

Immunocytochemistry (2)

Histochemistry and cell biology

Vesicular transport system in myotubes: ultrastructural study and signposting with vesicle-associated membrane proteins.

"PA1-768 was used in immunocytochemistry and western blot to study the morphology of the myotube vesicular transport system"

Authors: Tajika Y,Takahashi M,Khairani AF,Ueno H,Murakami T,Yorifuji H

Species
Mouse

Dilution
1:200

Year
2014

Acta histochemica et cytochemica

VAMP2 marks quiescent satellite cells and myotubes, but not activated myoblasts.

"PA1-768 was used in immunocytochemistry to investigate VAMP2 expression and its cellular distribution during muscle differentiation"

Authors: Tajika Y,Takahashi M,Hino M,Murakami T,Yorifuji H

Species
Mouse

Dilution
1:200

Year
2010

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WB (1)