abcam

ab180141

Anti-VILIP1 antibody [EPR9832]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR9832
Purification technique	Affinity purification Protein A
Concentration	0.332 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/50
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/250 - 1/500

Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information VSNL1

Function	Regulates (in vitro) the inhibition of rhodopsin phosphorylation in a calcium-dependent manner.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Visinin-like protein 1 commonly abbreviated as VILIP1 is a neuronal calcium sensor protein. It has a mass of about 22 kDa and consists of four EF-hand motifs that bind calcium ions. VILIP1 is primarily expressed in the central nervous system including regions such as the hippocampus and cerebral cortex. This protein interacts with membranes and other intracellular molecular targets in response to changes in calcium levels influencing cellular activities associated with calcium signaling.
Biological function summary	Visinin-like protein 1 modulates various physiological processes within neurons. It regulates signal transduction pathways by mediating calcium-dependent interactions with other proteins. VILIP1 may be part of complexes with other signaling proteins that participate in neurotransmitter release and synaptic plasticity. Its ability to modulate the phosphorylation status of its binding partners can influence neuronal excitability and synaptic communication.
Pathways	Various studies highlight how visinin-like protein 1 participates in critical signaling modules. This protein contributes to the regulation of the cAMP signaling pathway where it can affect the activation of adenylate cyclase. Moreover VILIP1 interacts with signaling pathways related to nicotinic acetylcholine receptors affecting the transmission of nerve impulses. It influences the dynamics between calcium signaling and cAMP affecting processes like learning and memory.
Associated diseases and disorders	Visinin-like protein 1 relates significantly to neurodegenerative diseases. Research findings associate elevated VILIP1 levels with Alzheimer's disease where it can serve as a biomarker for disease progression. Furthermore it connects to Parkinson's disease given its role in neuronal calcium homeostasis a critical factor in disease pathology. In Alzheimer's disease VILIP1 levels can correlate with beta-amyloid plaque development and tau protein phosphorylation.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

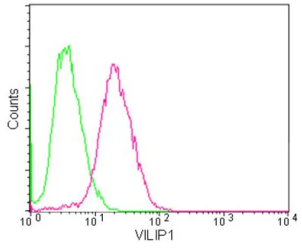
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

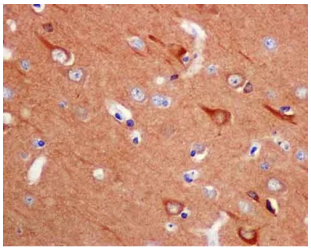
4 product images



Flow Cytometry (Intracellular) - Anti-VILIP1 antibody [EPR9832] (ab180141)

VILIP1 Flow Cytometry (Intracellular) staining using rabbit Anti-VILIP1 antibody

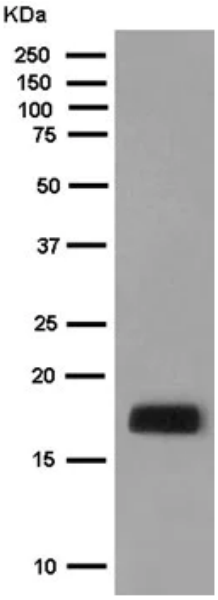
Intracellular flow cytometric analysis of 2% paraformaldehyde fixedSH-SY5Y cells labeling VILIP1 with ab180141 at 1/50. Secondary antibody Goat anti rabbit IgG (FITC) at 1/75. Isotype control Rabbit IgG.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VILIP1 antibody [EPR9832] (ab180141)

VILIP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-VILIP1 antibody

Immunohistochemical analysis of paraffin-embedded Human brain tissue labeling VILIP1 with ab180141 at 1/500 dilution. Secondary antibody Goat anti rabbit IgG(HRP) prediluted. Counter stain Hematoxylin.
Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Western blot - Anti-VILIP1 antibody [EPR9832] (ab180141)

VILIP1 Western blot staining of Human cerebellum using rabbit Anti-VILIP1 antibody

Blocking buffer and concentration: 5% NFDM/TBST
All lanes:
Western blot - Anti-VILIP1 antibody [EPR9832] (ab180141) at 1/1000 dilution

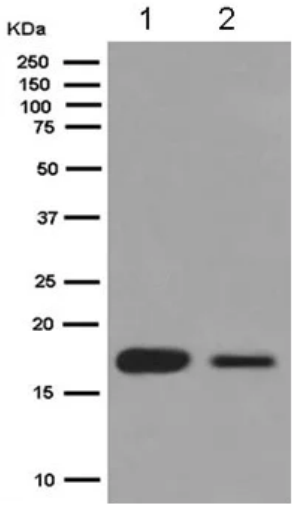
All lanes:
Human cerebellum at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab136636) at 1/500 dilution

Predicted band size: 22 kDa

Observed band size: 18 kDa



Western blot - Anti-VILIP1 antibody [EPR9832] (ab180141)

VILIP1 Western blot staining using rabbit Anti-VILIP1 antibody

Blocking buffer and concentration: 5% NFDM/TBST
All lanes:
Western blot - Anti-VILIP1 antibody [EPR9832] (ab180141) at 1/1000 dilution

Lane 1:
Mouse brain lysate

Lane 2:
Rat brain lysate

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 22 kDa

Observed band size: 18 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.