



Product datasheet

Anti-VDAC1/Porin antibody [N152B/23] ab186321

★★★★★ [5 Abreviews](#) [6 References](#) [7 Images](#)

Overview

Product name	Anti-VDAC1/Porin antibody [N152B/23]
Description	Mouse monoclonal [N152B/23] to VDAC1/Porin
Host species	Mouse
Specificity	ab186321 shows weak cross reactivity with VDAC3.
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant full length protein corresponding to Human VDAC1/Porin aa 1 to the C-terminus. Database link: P21796
	<div>  Run BLAST with </div> <div>  Run BLAST with </div>
Positive control	WB: HEK-293, HAP1, and MEF cell lysates. Rat brain tissue lysate. N-GST tagged Recombinant Human VDAC1 protein. ICC/IF: SH-SY5Y cells. IHC-P: Human tonsil, Human breast carcinoma, Rat Kidney, and Mouse kidney tissues.
General notes	<p>The clone number has been updated from S152B-23 to N152B/23, both clone numbers name the same antibody clone.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.1% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine)
Purity	Protein G purified
Clonality	Monoclonal

Clone number	N152B/23
Isotype	IgG2a

Applications

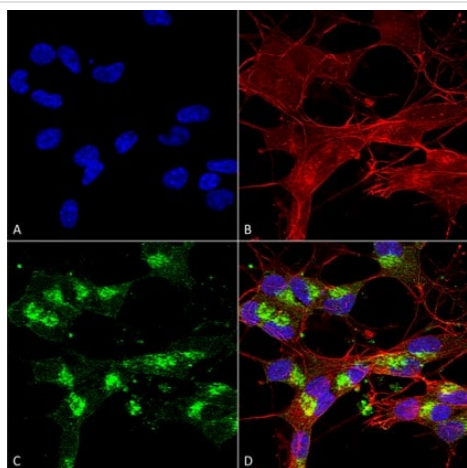
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab186321 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (4)	1/1000. Detects a band of approximately 30 kDa (predicted molecular weight: 31 kDa).
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF	★★★★★ (1)	1/100.

Target

Function	Forms a channel through the mitochondrial outer membrane and also the plasma membrane. The channel at the outer mitochondrial membrane allows diffusion of small hydrophilic molecules; in the plasma membrane it is involved in cell volume regulation and apoptosis. It adopts an open conformation at low or zero membrane potential and a closed conformation at potentials above 30-40 mV. The open state has a weak anion selectivity whereas the closed state is cation-selective. May participate in the formation of the permeability transition pore complex (PTPC) responsible for the release of mitochondrial products that triggers apoptosis.
Tissue specificity	Heart, liver and skeletal muscle.
Sequence similarities	Belongs to the eukaryotic mitochondrial porin family.
Domain	Consists mainly of a membrane-spanning beta-barrel formed by 19 beta-strands. The helical N-terminus folds back into the pore opening and plays a role in voltage-gated channel activity.
Cellular localization	Mitochondrion outer membrane. Cell membrane.

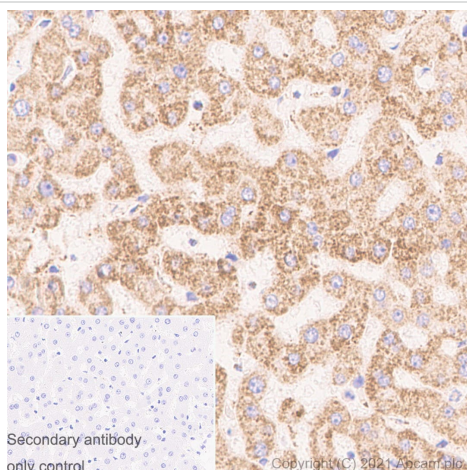
Images



Immunocytochemistry/ Immunofluorescence - Anti-VDAC1/ Porin antibody [N152B/23] (ab186321)

Immunocytochemical analysis of 4% Paraformaldehyde-fixed human SH-SY5Y cells labelling VDAC1 with ab186321 at 1/100 dilution, followed by a secondary antibody (Alexa Fluor® 488) at 1/1000 dilution for 1 hour at room temperature.

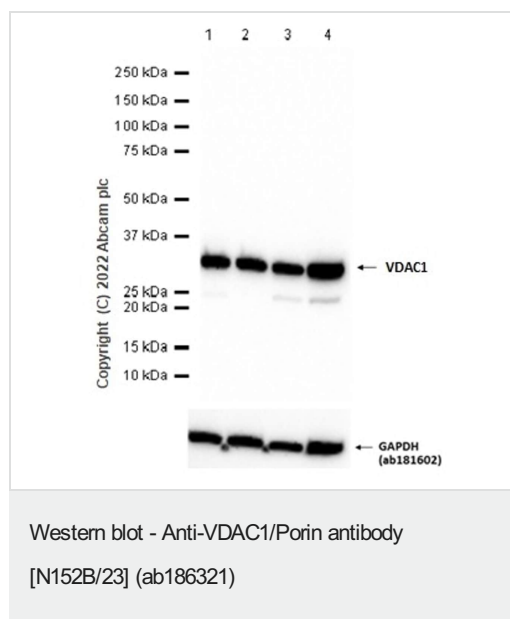
Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) VDAC1 Antibody (D) Composite.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VDAC1/ Porin antibody [N152B/23] (ab186321)

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labelling VDAC1 with ab186321 at 1/1000 dilution, followed by LeicaDS9800 (Bond™ Polymer Refine Detection) at the supplied concentration. Dot staining on human tonsil is observed. Counter stained with hematoxylin. The section was incubated with ab186321 for 30 mins at room temperature, followed by an anti-mouse IgG2a antibody for 8 mins during the LeicaDS9800 kit staining procedure. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

Secondary antibody only control: PBS used instead of primary antibody, secondary antibody is LeicaDS9800 (Bond™ Polymer Refine Detection).



All lanes : Anti-VDAC1/Porin antibody [N152B/23] (ab186321) at 1/1000 dilution

Lane 1 : HEK-293 (Human embryonic kidney epithelial cell) whole cell lysate

Lane 2 : HAP1 (Wildtype control Human chronic myelogenous leukemia near-haploid cell line) whole cell lysate

Lane 3 : MEF (Mus musculus Embryo Fibroblast) whole cell lysate

Lane 4 : Rat brain tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

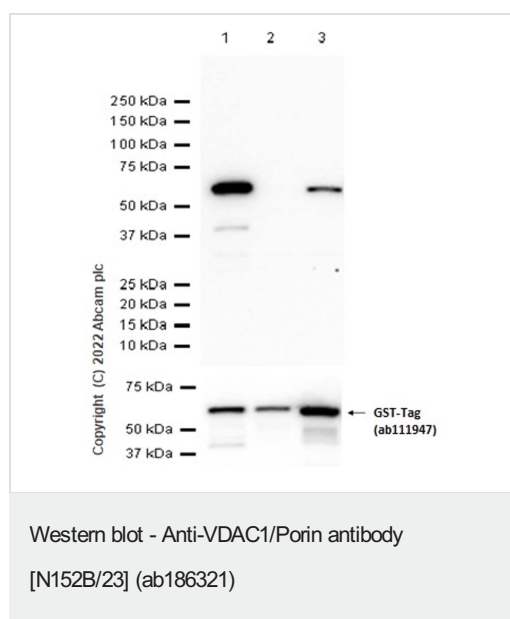
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 31 kDa

Observed band size: 33 kDa

Exposure time: 3 seconds

Blocking peptide and diluting buffer: 5% NFDM /TBST



All lanes : Anti-VDAC1/Porin antibody [N152B/23] (ab186321) at 1/1000 dilution

Lane 1 : N-GST tagged Recombinant Human VDAC1 (aa1 to 283) protein

Lane 2 : N-GST tagged Recombinant Human VDAC2 (aa 1 to 294) protein

Lane 3 : N-GST tagged Recombinant Human VDAC3 (aa 1 to 283) protein

Lysates/proteins at 0.01 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 31 kDa

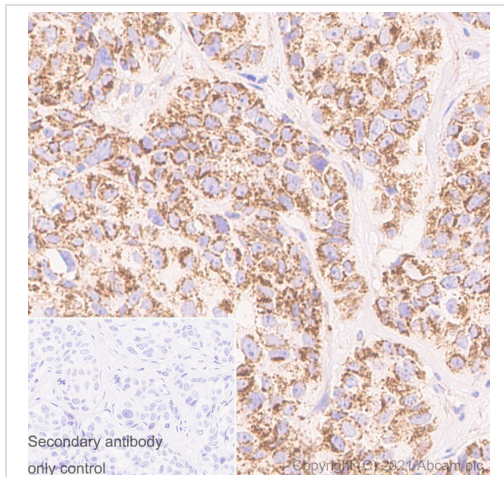
Observed band size: 33 kDa

Exposure time: 80 seconds

N-GST tagged Recombinant Human VDAC1 protein is available as **ab132481**

N-GST tagged Recombinant Human VDAC2 protein is available as **ab152793**

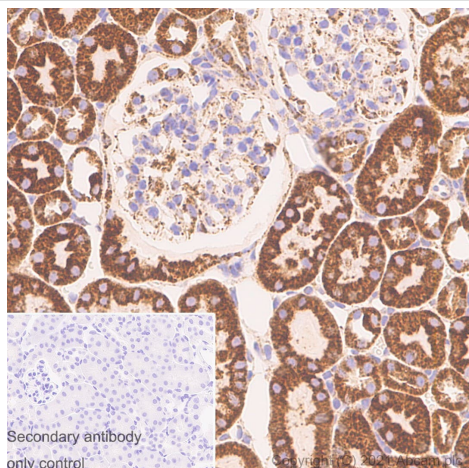
Blocking peptide and diluting buffer: 5% NFDM /TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VDAC1/Porin antibody [N152B/23] (ab186321)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue labelling VDAC1 with ab186321 at 1/1000 dilution, followed by LeicaDS9800 (Bond™ Polymer Refine Detection) at the supplied concentration. Dot staining on human breast carcinoma is observed. Counter stained with hematoxylin. The section was incubated with ab186321 for 30 mins at room temperature, followed by an anti-mouse IgG2a antibody for 8 mins during the LeicaDS9800 kit staining procedure. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

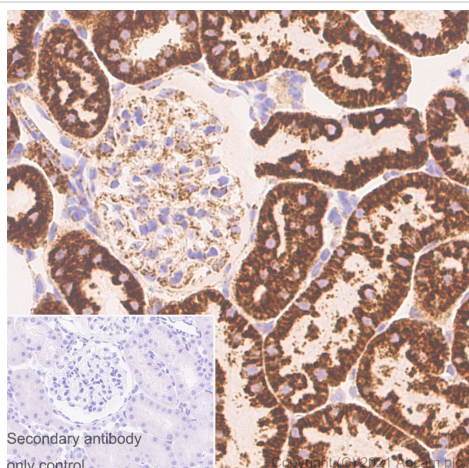
Secondary antibody only control: PBS used instead of primary antibody, secondary antibody is LeicaDS9800 (Bond™ Polymer Refine Detection).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VDAC1/Porin antibody [N152B/23] (ab186321)

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labelling VDAC1 with ab186321 at 1/1000 dilution, followed by LeicaDS9800 (Bond™ Polymer Refine Detection) at the supplied concentration. Dot staining on mouse kidney is observed. Counter stained with hematoxylin. The section was incubated with ab186321 for 30 mins at room temperature, followed by an anti-mouse IgG2a antibody for 8 mins during the LeicaDS9800 kit staining procedure. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

Secondary antibody only control: PBS used instead of primary antibody, secondary antibody is LeicaDS9800 (Bond™ Polymer Refine Detection).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VDAC1/Porin antibody [N152B/23] (ab186321)

Immunohistochemical analysis of paraffin-embedded rat kidney tissue labelling VDAC1 with ab186321 at 1/1000 dilution, followed by LeicaDS9800 (Bond™ Polymer Refine Detection) at the supplied concentration. Dot staining on rat kidney is observed. Counter stained with hematoxylin. The section was incubated with ab186321 for 30 mins at room temperature, followed by an anti-mouse IgG2a antibody for 8 mins during the LeicaDS9800 kit staining procedure. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

Secondary antibody only control: PBS used instead of primary antibody, secondary antibody is LeicaDS9800 (Bond™ Polymer Refine Detection).

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