

## Purified anti-VDAC1 Antibody (Previously Covance catalog# MMS-5205)

<b>Catalog# / Size</b>	820702 / 25 µL 820701 / 100 µL
<b>Clone</b>	N152B/23
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Voltage-dependent anion-selective channel protein 1, porin 31HL, porin 31HM, plasmalemmal porin, outer mitochondrial membrane protein porin 1, PORIN, VDAC-1
<b>Previously</b>	Covance Catalog# MMS-5205
<b>Isotype</b>	Mouse IgG2a, κ
<b>Description</b>	Voltage-dependent anion-selective channel protein 1 (VDAC1, also known as outer mitochondrial membrane protein porin 1, porin 31HL, and plasmalemmal porin) is a voltage-dependent anion channel and is the main calcium ion transport channel and plays a role in regulating the citric acid cycle and ROS generation. VDAC1 is implicated in cancer and neurodegenerative diseases through its ability to elevate ROS production.

### Product Details

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<b>Reactivity</b>	Human, Mouse, Rat
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	This monoclonal antibody was raised against a fusion protein corresponding to amino acids 1-283 (full-length) of human VDAC1.
<b>Formulation</b>	Phosphate-buffered solution.
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Concentration</b>	1 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C. Please note the storage condition for this antibody has been changed from -20°C to between 2°C and 8°C. You can also check your vial or your CoA to find the most accurate storage condition for this antibody.
<b>Application</b>	<a href="#">WB - Quality tested</a> <a href="#">IHC-P - Verified</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">Western blotting</a> . For Western blotting, the suggested use of this reagent is 1.0 - 5.0 µg per ml. For immunohistochemistry of formalin-fixed paraffin-embedded tissue, a concentration range of 1.0 - 5.0 µg/ml is suggested. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application Notes</b>	This antibody is effective in immunoblotting (WB) and immunohistochemistry (IHC).
<b>Product Citations</b>	1. Manjunath LE, <i>et al.</i> 2020. J Biol Chem. 295:17009. <a href="#">PubMed</a> 2. Enming Zhang <i>et al.</i> 2018. Cell metabolism. 29(1):64-77 . <a href="#">PubMed</a> 3. Verma V, <i>et al.</i> 2020. Sci Rep. 10:12653. <a href="#">PubMed</a>
<b>RRID</b>	AB_2750531 (BioLegend Cat. No. 820702) AB_2564843 (BioLegend Cat. No. 820701)

### Antigen Details

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<b>Structure</b>	VDAC1 is a 283 amino acid protein with a molecular weight of 30 kD.
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**Biology Area**

Cell Biology, Mitochondrial Function, Neuroscience, Neuroscience Cell Markers

**Molecular Family**

Mitochondrial Markers

**Gene ID**

[7416](#)

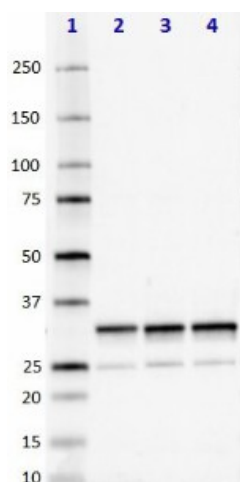
## Other Formats

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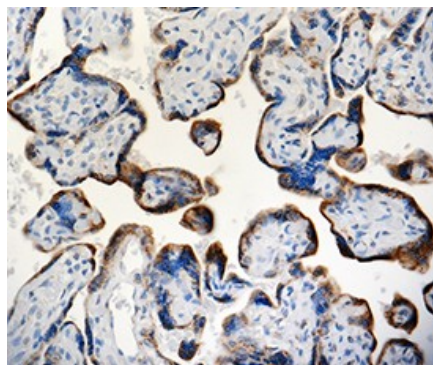
Purified anti-VDAC1, Biotin anti-VDAC1

## Product Data

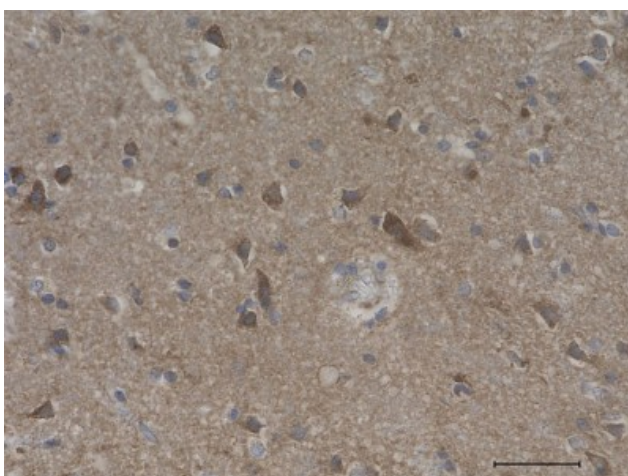
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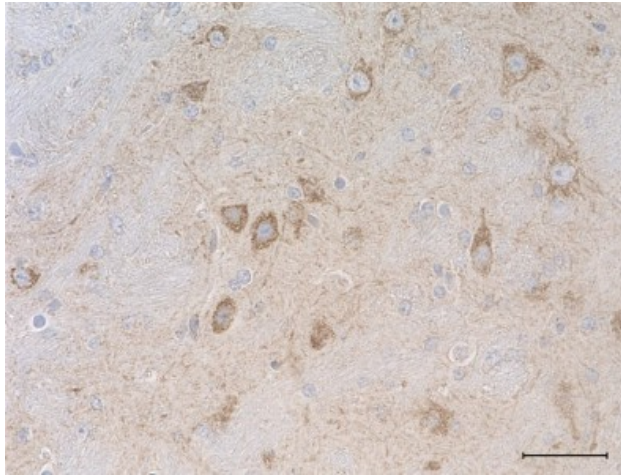
Western blot of anti-VDAC1 antibody (clone N152B/23). Lane 1: Molecular weight marker; Lane 2: 20 µg of human brain membrane lysate; Lane 3: 20 µg of mouse brain membrane lysate; Lane 4: 20 µg of rat brain membrane lysate. The blot was incubated with 1 µg/mL of the primary antibodies overnight at 4°C, followed by incubation with HRP labeled goat anti-mouse IgG (Cat. No. 405301). Enhanced chemiluminescence was used as the detection system.



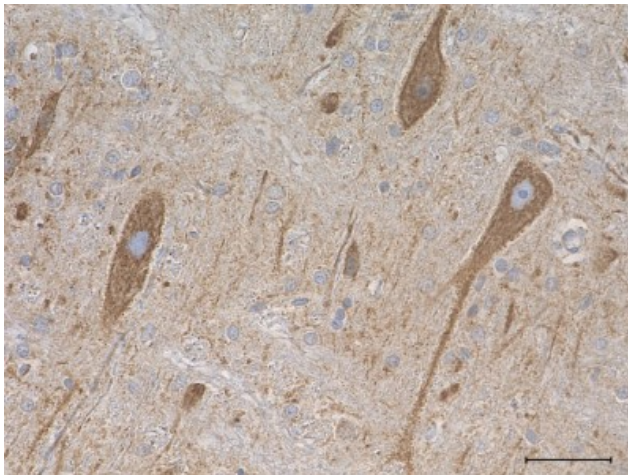
IHC staining of anti-VDAC1 antibody (clone N152B/23) on formalin-fixed paraffin-embedded human placenta tissue. Following antigen retrieval using Sodium Citrate H.I.E.R (Cat. No. 928602), the tissue was incubated with 10 µg/ml of the primary antibody overnight at 4°C. BioLegend's Ultra-Streptavidin (USA) HRP kit (Multi-Species, DAB, Cat. No. 929901) was used for detection followed by hematoxylin counterstaining, according to the protocol provided. The image was captured with a 40X objective.



IHC staining of anti-VDAC1 antibody (clone N152B/23) on formalin-fixed paraffin-embedded human brain tissue. Following antigen retrieval using Sodium Citrate H.I.E.R (Cat. No. 928602), the tissue was incubated with 5 µg/ml of the primary antibody overnight at 4°C. BioLegend's Ultra-Streptavidin (USA) HRP kit (Multi-Species, DAB, Cat. No. 929901) was used for detection followed by hematoxylin counterstaining, according to the protocol provided. The image was captured with a 40X objective. Scale bar: 50 µm.



IHC staining of anti-VDAC1 antibody (clone N152B/23) on formalin-fixed paraffin-embedded mouse brain tissue. Following antigen retrieval using Sodium Citrate H.I.E.R (Cat. No. 928602), the tissue was incubated with 5  $\mu$ g/ml of the primary antibody overnight at 4°C. BioLegend's Ultra-Streptavidin (USA) HRP kit (Multi-Species, DAB, Cat. No. 929901) was used for detection followed by hematoxylin counterstaining, according to the protocol provided. The image was captured with a 40X objective. Scale bar: 50  $\mu$ m.



IHC staining of anti-VDAC1 antibody (clone N152B/23) on formalin-fixed paraffin-embedded rat brain tissue. Following antigen retrieval using Sodium Citrate H.I.E.R (Cat. No. 928602), the tissue was incubated with 5  $\mu$ g/ml of the primary antibody overnight at 4°C. BioLegend's Ultra-Streptavidin (USA) HRP kit (Multi-Species, DAB, Cat. No. 929901) was used for detection followed by hematoxylin counterstaining, according to the protocol provided. The image was captured with a 40X objective. Scale bar: 50  $\mu$ m.

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