

**VDAC1 Antibody**  
**VDAC1 Antibody, Clone S152B-23**  
**Catalog # ASM10290****Specification**

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**VDAC1 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P21796</a>
Other Accession	<a href="#">NP_003365.1</a>
Host	<b>Mouse</b>
Isotype	<b>IgG2a</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Monoclonal</b>

**Description**

Mouse Anti-Human VDAC1 Monoclonal IgG2a

**Target/Specificity**

Detects ~30kDa. Does not cross-react with VDAC2 or VDAC3 (based on KO validation results).

**Other Names**

Voltage Dependent Anion Channel 1 Antibody, Porin Antibody, Voltage dependent anion selective channel protein 1 Antibody, Voltage-dependent anion-selective channel protein 1 Antibody, hVDAC1 Antibody, MGC111064 Antibody, Mitochondrial Porin Antibody, Outer mitochondrial membrane protein porin 1 Antibody, Plasmalemmal porin Antibody, Porin 31HL Antibody, Porin 31HM Antibody, PORIN-31-HL Antibody, VDAC 1 Antibody, VDAC Antibody, VDAC-1 Antibody

**Immunogen**

Fusion protein amino acids 1-283 (full-length) of human VDAC1. Mouse: 98% identity (279/283 amino acids identical). Rat: 98% identity (279/283 amino acids identical) &gt;60% identity with VDAC2 and VDAC3.

**Purification**

Protein G Purified

Storage **-20°C****Storage Buffer**

PBS pH 7.4, 50% glycerol, 0.1% sodium azide

Shipping Temperature **Blue Ice or 4°C****Certificate of Analysis**

1 µg/ml of SMC-456 was sufficient for detection of VDAC1 in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

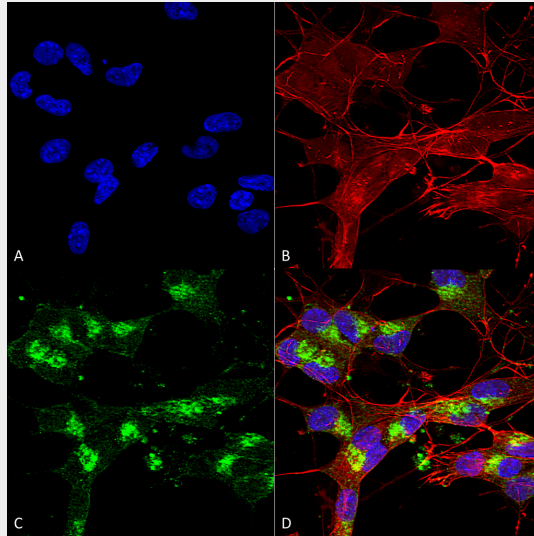
Mitochondrion | Mitochondrion Outer Membrane | Cell Membrane

**VDAC1 Antibody - Protocols**

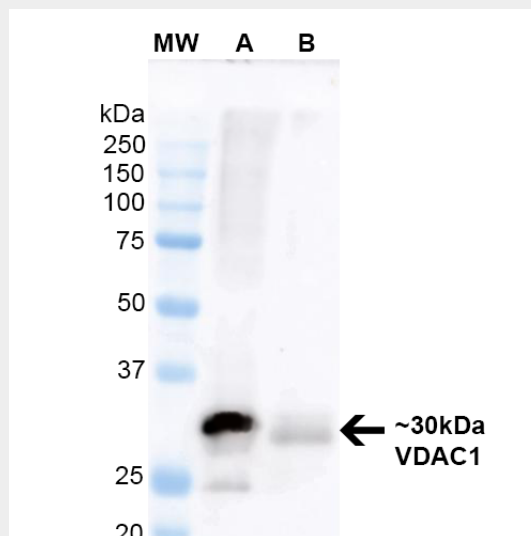
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### VDAC1 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-VDAC1 Monoclonal Antibody, Clone N152B/23 (ASM10290). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-VDAC1 Monoclonal Antibody (ASM10290) at 1:100 for overnight at 4°C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. 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.



Western Blot analysis of Mouse Brain and Human RT-4 lysates showing detection of ~30 kDa VDAC1 protein using Mouse Anti-VDAC1 Monoclonal Antibody, Clone N152B/23 (ASM10290). Lane

1: Molecular Weight Ladder. Lane A: Mouse Brain Lysate. Lane B: Human RT-4 Lysate. Block: 5% Skim milk in TBST. Primary Antibody: Mouse Anti-VDAC1 Monoclonal Antibody (ASM10290) at 1:200 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:2000 for 60 min at RT. Color Development: ECL solution for 5 min in RT. Predicted/Observed Size: ~30 kDa.

### **VDAC1 Antibody - Background**

Voltage-dependent anion-selective channel protein 1 (also known as VDAC, VDAC1 or outer mitochondrial membrane protein porin 1) is the the outer mitochondrial membrane receptor for hexokinase and BCL2L1. VDAC forms a channel through the mitochondrial membrane and is involved in small molecule diffusion, cell volume regulation and apoptosis. VDAC may participate in the formation of the permeability transition pore complex (PTPC), which is responsible for the release of mitochondrial products that triggers apoptosis.