10320 Camino Santa Fe, Suite G
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VDAC1 Antibody
VDAC1 Antibody, Clone S152B-23
Catalog # ASM10290

Specification

VDAC1 Antibody - Product Information

Application	**WB**
Primary Accession	P21796
Other Accession	NP_003365.1.
Host	**Mouse**
Isotype	**IgG2a**
Reactivity	**Human, Mouse, Rat**
Clonality	**Monoclonal**

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) >60% identity with VDAC2 and VDAC3.

Purification
Protein G Purified

Storage	**-20ºC**

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

Shipping Temperature	**Blue Ice or 4ºC**

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.

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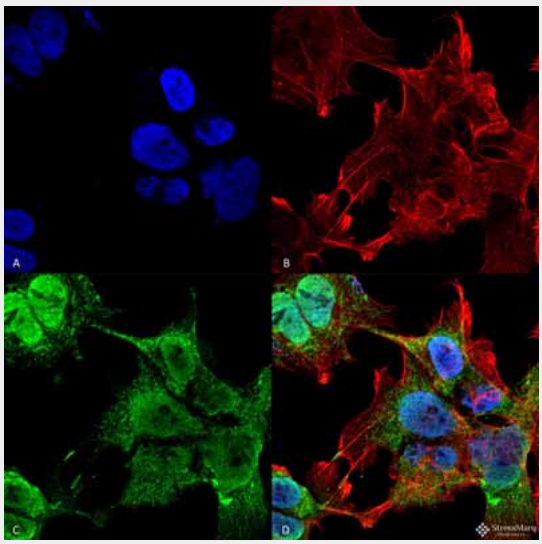
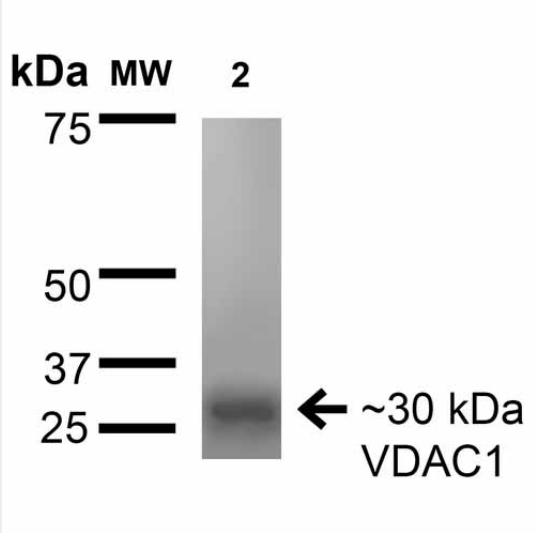
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

VDAC1 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-VDAC1 Monoclonal Antibody, Clone S152B-23 (ASM10290). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-VDAC1 Monoclonal Antibody (ASM10290) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000; 1:5000 for 60 min RT, 5 min RT. Localization: Mitochondrion, Mitochondrion Outer Membrane, Nucleus. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) VDAC1 Antibody (D) Composite.



Western Blot analysis of Rat Brain Membrane showing detection of ~30 kDa VDAC1 protein using

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Mouse Anti-VDAC1 Monoclonal Antibody, Clone S152B-23 (ASM10290). Lane 1: Molecular Weight Ladder. Lane 2: Rat Brain Membrane. Load: 15 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-VDAC1 Monoclonal Antibody (ASM10290) at 1:200 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:1000 for 1 hour RT. Color Development: ECL solution for 6 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.