

## Mouse VDAC1 Monoclonal Antibody | anti-VDAC1 antibody

VDAC1 Monoclonal Antibody

|                               |                      |                                        |                                                           |
|-------------------------------|----------------------|----------------------------------------|-----------------------------------------------------------|
| CATALOG #<br><b>AAA179740</b> | HOST<br><b>Mouse</b> | REACTIVITY<br><b>Human, Mouse, Rat</b> | APPLICATIONS<br><b>Immunohistochemistry, Western Blot</b> |
|-------------------------------|----------------------|----------------------------------------|-----------------------------------------------------------|

### PRODUCT SYNONYMS

VDAC1; Monoclonal Antibody; VDAC1 Monoclonal Antibody; Non-selective voltage-gated ion channel VDAC1; Outer mitochondrial membrane protein porin 1; Plasmalemmal porin; Porin 31HL; Porin 31HM; Voltage-dependent anion-selective channel protein 1 (VDAC-1; hVDAC1); VDAC; anti-VDAC1 antibody

### PRODUCT SPECIFICATIONS

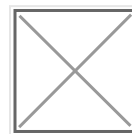
|                                                 |                                                                                                                  |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Host                                            | Mouse                                                                                                            |
| Reactivity                                      | Human, Mouse, Rat                                                                                                |
| Clonality                                       | Monoclonal                                                                                                       |
| Isotype                                         | IgG1                                                                                                             |
| Clone Number                                    | Da-2G11                                                                                                          |
| Purity/Purification                             | Protein A/G Purification                                                                                         |
| Form/Format                                     | PBS with 0.02% sodium azide, 1% protective protein and 50% glycerol, pH7.4                                       |
| Concentration                                   | 1mg/mL (varies by lot)                                                                                           |
| Applicable Applications for anti-VDAC1 antibody | IHC (Immunohistochemistry), WB (Western Blot)                                                                    |
| Immunogen                                       | Synthetic peptide corresponding to Human VDAC1 protein                                                           |
| Preparation and Storage                         | Store at -20 degree C Valid for 12 months. Avoid freeze/thaw cycles. Protected from prolonged exposure to light. |

### IMAGES



#### IHC (Immunohistochemistry)

Immunohistochemistry of paraffin-embedded rat ovary using VDAC1 Monoclonal Antibody at dilution of 1:500.



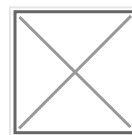
#### IHC (Immunohistochemistry)

Immunohistochemistry of paraffin-embedded mouse ovary using VDAC1 Monoclonal Antibody at dilution of 1:500.



#### IHC (Immunohistochemistry)

Immunohistochemistry of paraffin-embedded human lung cancer using VDAC1 Monoclonal Antibody at dilution of 1:500.



#### IHC (Immunohistochemistry)

Immunohistochemistry of paraffin-embedded human colon cancer using VDAC1 Monoclonal Antibody at dilution of 1:500.



**WB (Western Blot)**

Western Blot with Anti VDAC1 Monoclonal Antibody at dilution of 1:1000.Lane 1.MCF-7 cell lysate,Lane 2.Jurkat cell lysate,Lane 3.293T cell lysate,Lane 4.HL-60 cell lysate,Lane 5.HeLa cell lysate,Lane 6.A431 cell lysate,Lane 7.C6 cell lysate,Lane 8.PC-12 cell lysate,Lane 9.Rat liver tissue lysate

**ADDITIONAL INFORMATION**

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-VDAC1 antibody | Non-selective voltage-gated ion channel that mediates the transport of anions and cations through the mitochondrion outer membrane and 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. Binds various signaling molecules, including the sphingolipid ceramide, the phospholipid phosphatidylcholine, and the sterols cholesterol and oxysterol. In depolarized mitochondria, acts downstream of PRKN and PINK1 to promote mitophagy or prevent apoptosis; polyubiquitination by PRKN promotes mitophagy, while monoubiquitination by PRKN decreases mitochondrial calcium influx which ultimately inhibits apoptosis. May participate in the formation of the permeability transition pore complex (PTPC) responsible for the release of mitochondrial products that triggers apoptosis. May mediate ATP export from cells. Part of a complex composed of HSPA9, ITPR1 and VDAC1 that regulates mitochondrial calcium-dependent apoptosis by facilitating calcium transport from the ER lumen to the mitochondria intermembrane space thus providing calcium for the downstream calcium channel MCU that directly releases it into mitochondria matrix. Mediates cytochrome c efflux. Catalyzes the scrambling of phospholipids across the outer mitochondrial membrane; the mechanism is unrelated to channel activity and is capable of translocating both anionic and zwitterionic phospholipids. |
| Product Categories/Family for anti-VDAC1 antibody   | Primary Antibodies; Tags/Controls Antibodies; Tags & Cell Markers; Signal Transduction; Isotype; Loading Controls; Metabolism                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

**NCBI AND UNIPROT INFORMATION**

|                                  |                                                                                                                                               |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 4507879                                                                                                                                       |
| NCBI GeneID                      | 7416                                                                                                                                          |
| NCBI Accession #                 | NP_003365.1                                                                                                                                   |
| NCBI GenBank Nucleotide #        | NM_003374.2                                                                                                                                   |
| UniProt Accession #              | P21796; Q5FVE7; Q9UIQ5; Q9UPL0; B3KVK4; D3DQ93                                                                                                |
| Molecular Weight                 | 31kDa                                                                                                                                         |
| NCBI Official Full Name          | voltage-dependent anion-selective channel protein 1                                                                                           |
| NCBI Official Synonym Full Names | voltage-dependent anion channel 1                                                                                                             |
| NCBI Official Symbol             | VDAC1                                                                                                                                         |
| NCBI Official Synonym Symbols    | PORIN; VDAC-1                                                                                                                                 |
| NCBI Protein Information         | voltage-dependent anion-selective channel protein 1; porin 31HL; porin 31HM; plasmalemmal porin; outer mitochondrial membrane protein porin 1 |
| UniProt Protein Name             | Voltage-dependent anion-selective channel protein 1                                                                                           |
| UniProt Gene Name                | VDAC1                                                                                                                                         |
| UniProt Synonym Gene Names       | VDAC; VDAC-1; hVDAC1                                                                                                                          |
| UniProt Entry Name               | VDAC1_HUMAN                                                                                                                                   |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/vdac1-antibody-clone-da-2g11-immunohistochemistry-western-blot-elisa/179740>