

**VDAC1 / PORIN Antibody (C-Terminus)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS15225****Specification**

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**VDAC1 / PORIN Antibody (C-Terminus) - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">P21796</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>31kDa KDa</b>

**VDAC1 / PORIN Antibody (C-Terminus) - Additional Information****Gene ID** 7416**Other Names**

Voltage-dependent anion-selective channel protein 1, VDAC-1, hVDAC1, Outer mitochondrial membrane protein porin 1, Plasmalemmal porin, Porin 31HL, Porin 31HM, VDAC1, VDAC

**Reconstitution & Storage**

Long term: -20°C; Short term: -20°C

**Precautions**

VDAC1 / PORIN Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

**VDAC1 / PORIN Antibody (C-Terminus) - Protein Information****Name** VDAC1**Synonyms** VDAC**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 (PubMed: [11845315](http://www.uniprot.org/citations/11845315), PubMed: [18755977](http://www.uniprot.org/citations/18755977), PubMed: [20230784](http://www.uniprot.org/citations/20230784), PubMed: [8420959](http://www.uniprot.org/citations/8420959)). Binds various signaling molecules, including the sphingolipid ceramide, the phospholipid phosphatidylcholine, and the sterols cholesterol and oxysterol (PubMed: [31015432](http://www.uniprot.org/citations/31015432)). 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 (PubMed:<a href="http://www.uniprot.org/citations/32047033" target="\_blank">32047033</a>). May participate in the formation of the permeability transition pore complex (PTPC) responsible for the release of mitochondrial products that triggers apoptosis (PubMed:<a href="http://www.uniprot.org/citations/15033708" target="\_blank">15033708</a>, PubMed:<a href="http://www.uniprot.org/citations/25296756" target="\_blank">25296756</a>). May mediate ATP export from cells (PubMed:<a href="http://www.uniprot.org/citations/30061676" target="\_blank">30061676</a>).

#### Cellular Location

Mitochondrion outer membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Membrane raft; Multi-pass membrane protein

#### Tissue Location

Expressed in erythrocytes (at protein level) (PubMed:27641616). Expressed in heart, liver and skeletal muscle (PubMed:8420959).

#### Volume

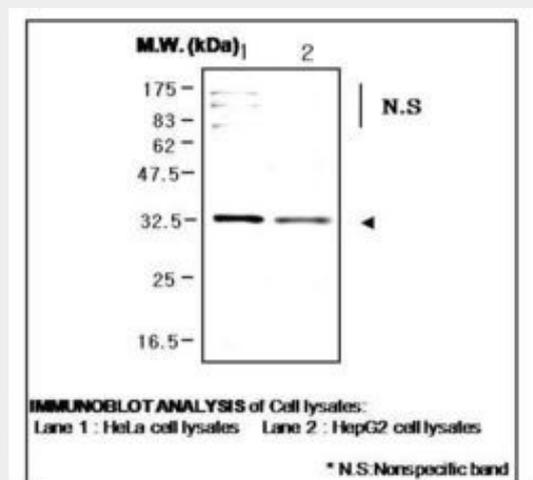
50 µl

### VDAC1 / PORIN Antibody (C-Terminus) - Protocols

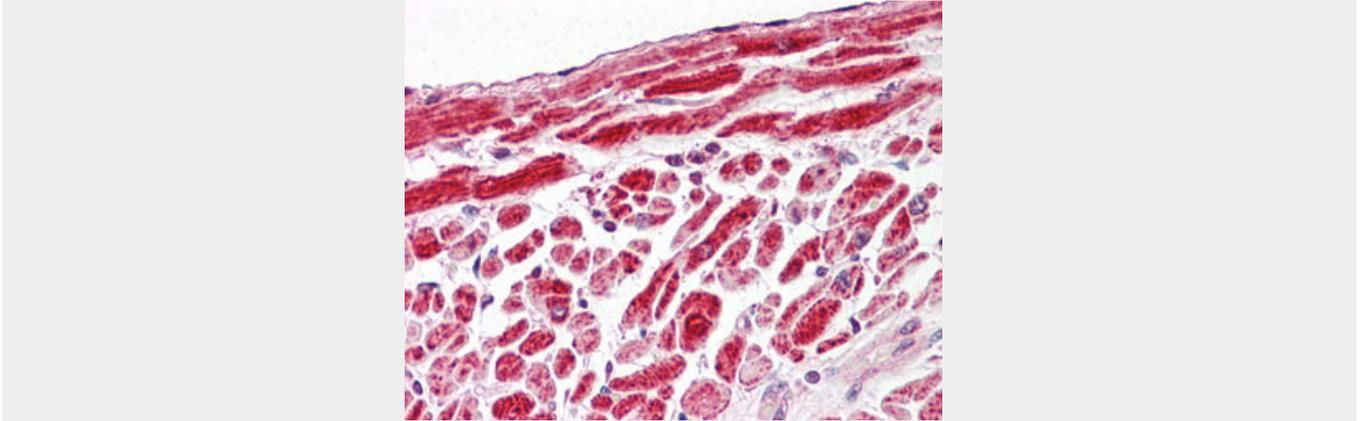
Provided below are standard protocols that you may find useful for product applications.

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

### VDAC1 / PORIN Antibody (C-Terminus) - Images



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Anti-PORIN / VDAC-1 antibody IHC of human heart.

### **VDAC1 / PORIN Antibody (C-Terminus) - Background**

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.

### **VDAC1 / PORIN Antibody (C-Terminus) - References**

- Blachly-Dyson E., et al. *J. Biol. Chem.* 268:1835-1841(1993).
- Blachly-Dyson E., et al. *Biophys. J.* 59:216A-216A(1991).
- Decker W.K., et al. *Mamm. Genome* 10:1041-1042(1999).
- Messina A., et al. *Biochem. Biophys. Res. Commun.* 270:787-792(2000).
- Ota T., et al. *Nat. Genet.* 36:40-45(2004).