

VDAC1 / PORIN Antibody (aa185-197)
Rabbit Polyclonal Antibody
Catalog # ALS11368**Specification**

VDAC1 / PORIN Antibody (aa185-197) - Product Information

Application	IHC
Primary Accession	P21796
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31kDa KDa

VDAC1 / PORIN Antibody (aa185-197) - 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

Target/Specificity

Amino acids 185-197 of Human VDAC1/Porin1.

Reconstitution & Storage

+4°C or -20°C, Avoid repeated freezing and thawing.

Precautions

VDAC1 / PORIN Antibody (aa185-197) is for research use only and not for use in diagnostic or therapeutic procedures.

VDAC1 / PORIN Antibody (aa185-197) - 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). 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:32047033). May participate in the formation of the permeability transition pore complex (PTPC) responsible for the release of mitochondrial products that triggers apoptosis (PubMed:15033708, PubMed:25296756). May mediate ATP export from cells (PubMed:30061676).

Cellular Location

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

Tissue Location

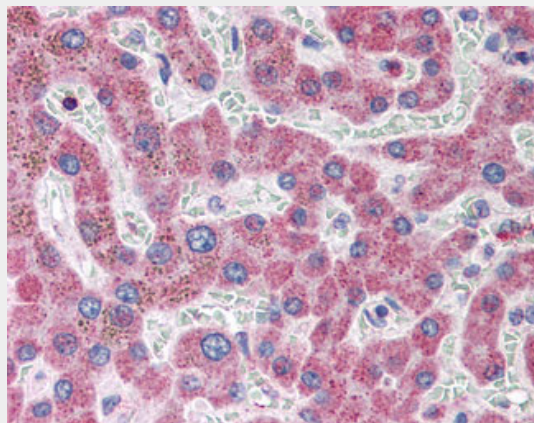
Expressed in erythrocytes (at protein level) (PubMed:27641616). Expressed in heart, liver and skeletal muscle (PubMed:8420959).

VDAC1 / PORIN Antibody (aa185-197) - 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 (aa185-197) - Images



Anti-VDAC1 antibody IHC of human liver.

VDAC1 / PORIN Antibody (aa185-197) - Background

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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.

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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).