

Anti-VDAC1 / PORIN Antibody (clone 2A8)
Mouse Anti Human Monoclonal Antibody
Catalog # ALS17720**Specification**

Anti-VDAC1 / PORIN Antibody (clone 2A8) - Product Information

Application	WB, IHC-P, E
Primary Accession	P21796
Predicted	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a,k
Calculated MW	30773

Anti-VDAC1 / PORIN Antibody (clone 2A8) - Additional Information**Gene ID** 7416**Alias Symbol** **VDAC1****Other Names**

VDAC1, HVDAC1, Plasmalemmal porin, Porin 31HM, PORIN, PORIN-31-HL, Vdac5, VDAC, Mitochondrial porin, Porin 31HL, VDAC-1

Target/Specificity

Human VDAC1

Reconstitution & Storage

Protein A purified

Precautions

Anti-VDAC1 / PORIN Antibody (clone 2A8) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-VDAC1 / PORIN Antibody (clone 2A8) - 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). 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). As part of a complex composed by HSPA9, ITPR1 and VDAC1, directly controls calcium uptake into mitochondria (PubMed:17178908).

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).

Anti-VDAC1 / PORIN Antibody (clone 2A8) - 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](#)

Anti-VDAC1 / PORIN Antibody (clone 2A8) - Images