

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, PubMed:18755977, PubMed: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).

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