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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 sterol cholesterol (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 Cytomety
- Cell Culture

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