10320 Camino Santa Fe, Suite G
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VDAC1 / PORIN Antibody
Rabbit Polyclonal Antibody
Catalog # ALS17058

Specification

VDAC1 / PORIN Antibody - Product Information

Application	**IHC, WB**
Primary Accession	P21796
Other Accession	7416
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**30773**

VDAC1 / PORIN Antibody - Additional Information

Gene ID 7416

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

Target/Specificity
VDAC1 antibody detects endogenous levels of VDAC1 protein. Not tested with other proteins.

Reconstitution & Storage
PBS, pH 7.4, 0.02% sodium azide. Store at -20°C for up to one year.

Precautions
VDAC1 / PORIN Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

VDAC1 / PORIN Antibody - 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

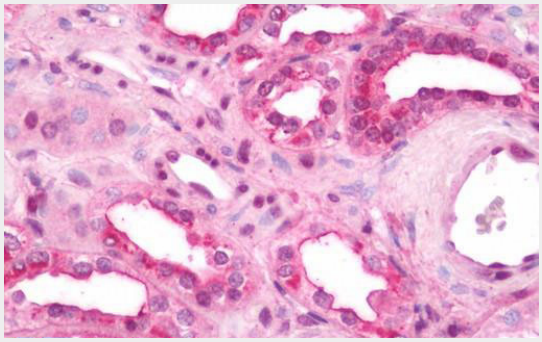
Tissue Location
Expressed in erythrocytes (at protein level) (PubMed:27641616). Expressed in heart, liver and skeletal muscle (PubMed:8420959).

VDAC1 / PORIN Antibody - 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

VDAC1 / PORIN Antibody - Images



Human Kidney: Formalin-Fixed, Paraffin-Embedded (FFPE)

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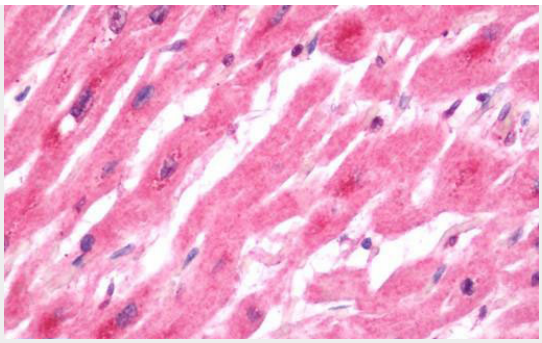
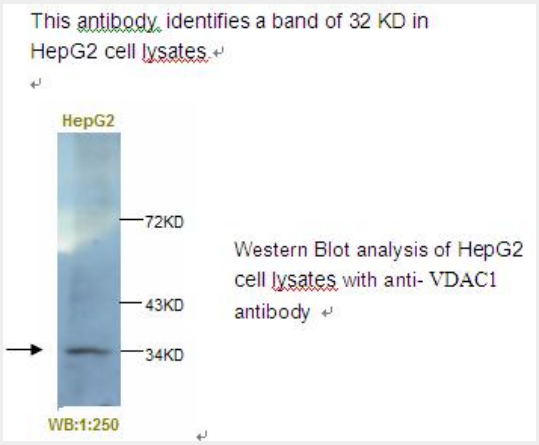


Human Heart: Formalin-Fixed, Paraffin-Embedded (FFPE)



western blot analysis of hepg2 cell lysates wirh anti-vdac1 antibody

VDAC1 / PORIN Antibody - Background

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VDAC1 / PORIN Antibody - References

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Decker W.K.,et al.Mamm. Genome 10:1041-1042(1999).
Messina A.,et al.Biochem. Biophys. Res. Commun. 270:787-792(2000).
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