

Basic Information

Product Name	Anti-VDAC1 Antibody (Clone#DBA-22)	
Gene Name	VDAC1	
Source	Rabbit	
Clonality	Monoclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF	
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.	
Immunogen	A synthesized peptide derived from human VDAC1	
Purification	Affinity-chromatography	
Observed MW	31 kDa	
Dilution Ratios	Western blot (WB): Immunohistochemistry (IHC): Immunocytochemistry/Immunofluorescence (ICC/IF):	1:500-2000 1:50-200 1:50-200

Storage

12 months from date of receipt, -20°C as supplied.

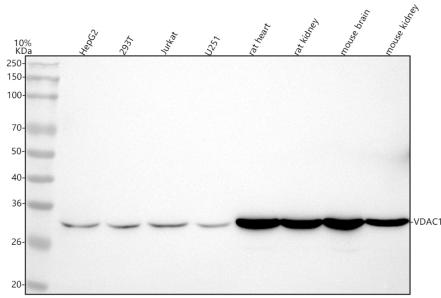
Background Information

The voltage-dependent anion channel (VDAC) of the outer mitochondrial membrane is a small, abundant outer membrane pore-forming protein found in the outer membranes of all eukaryotic mitochondria. The VDAC protein is thought to form the major pathway for movement of adenine nucleotides through the outer membrane and to be the mitochondrial binding site for hexokinase and glycerol kinase. At low transmembrane voltage, VDAC is open for anions such as phosphate, chloride, and adenine nucleotides. At higher transmembrane voltage, VDAC functions as a selective channel for cations and uncharged molecules. These features make VDAC likely to play a role in mitochondrial energy metabolism. Huizing et al. studied by Northern and Western blot analyses the human tissue distribution of mitochondrial transmembrane metabolite carriers. They found that VDAC1 mRNA has a ubiquitous distribution, with most pronounced expression in heart, liver, and skeletal muscle, whereas the VDAC2 isoform appears to be expressed only in the heart.

Reference

Anti-VDAC1 Antibody (Clone#DBA-22)被引用在1文献中。

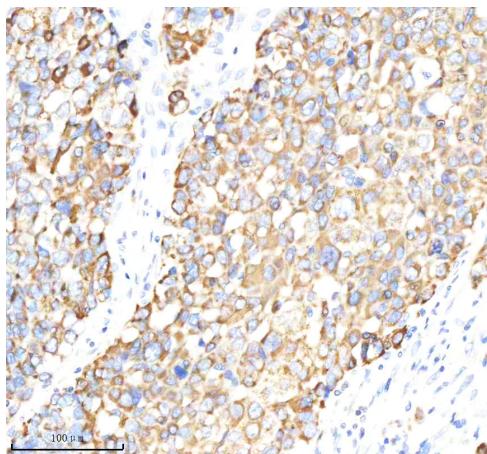
Selected Validation Data



Western blot analysis of anti-VDAC1 antibody (BM4279). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

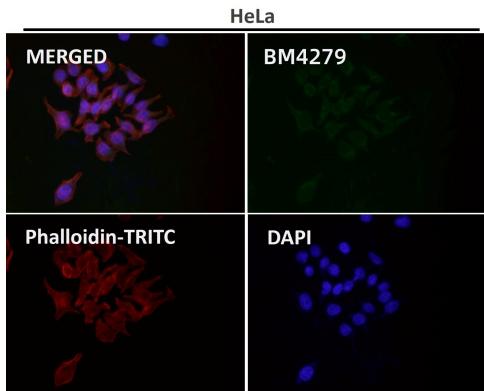
Lane 1: human HepG2 whole cell lysates,
Lane 2: human 293T whole cell lysates,
Lane 3: human Jurkat whole cell lysates,
Lane 4: human U251 whole cell lysates,
Lane 5: rat heart tissue lysates,
Lane 6: rat kidney tissue lysates,
Lane 7: mouse brain tissue lysates,
Lane 8: mouse kidney tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-VDAC1 antigen affinity purified monoclonal antibody (BM4279) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for VDAC1 at approximately 31 kDa. The expected band size for VDAC1 is at 31 kDa.



IHC analysis of VDAC1 using anti-VDAC1 antibody (BM4279) .

VDAC1 was detected in a paraffin-embedded section of human liver cancer tissue. The tissue section was incubated with rabbit anti-VDAC1 Antibody (BM4279) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



Immunofluorescent analysis using the Antibody.