

VDAC1 Polyclonal Antibody

Catalog No :	YT5390
Reactivity :	Human;Mouse;Rat
Applications :	WB;ELISA
Target :	VDAC1
Fields :	>>Calcium signaling pathway;>>cGMP-PKG signaling pathway;>>Necroptosis;>>Cellular senescence;>>Neutrophil extracellular trap formation;>>NOD-like receptor signaling pathway;>>Cholesterol metabolism;>>Alzheimer disease;>>Parkinson disease;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Spinocerebellar ataxia;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Shigellosis;>>Influenza A;>>Human T-cell leukemia virus 1 infection;>>Chemical carcinogenesis - reactive oxygen species;>>Diabetic cardiomyopathy
Gene Name :	VDAC1
Protein Name :	Voltage-dependent anion-selective channel protein 1
Human Gene Id :	7416
Human Swiss Prot No :	P21796
Mouse Gene Id :	22333
Mouse Swiss Prot No :	Q60932
Rat Gene Id :	83529
Rat Swiss Prot No :	Q9Z2L0
Immunogen :	The antiserum was produced against synthesized peptide derived from the N-terminal region of human VDAC1. AA range:1-50
Specificity :	VDAC1 Polyclonal Antibody detects endogenous levels of VDAC1 protein.

Formulation :	<u>Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.</u>
Source :	<u>Polyclonal, Rabbit,IgG</u>
Dilution :	<u>WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.</u>
Purification :	<u>The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.</u>
Concentration :	<u>1 mg/ml</u>
Storage Stability :	<u>-15°C to -25°C/1 year(Do not lower than -25°C)</u>
Observed Band :	<u>31kD</u>
Cell Pathway :	<u>Calcium;Parkinson's disease;Huntington's disease;</u>
Background :	<u>This gene encodes a voltage-dependent anion channel protein that is a major component of the outer mitochondrial membrane. The encoded protein facilitates the exchange of metabolites and ions across the outer mitochondrial membrane and may regulate mitochondrial functions. This protein also forms channels in the plasma membrane and may be involved in transmembrane electron transport. Alternate splicing results in multiple transcript variants. Multiple pseudogenes of this gene are found on chromosomes 1, 2 3, 6, 9, 12, X and Y.[provided by RefSeq, Sep 2010],</u>
Function :	<u>domain:Consists mainly of a membrane-spanning beta-barrel formed by 19 beta-strands. The helical N-terminus folds back into the pore opening and plays a role in voltage-gated channel activity.,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. May participate in the formation of the permeability transition pore complex (PTPC) responsible for the release of mitochondrial products that triggers apoptosis.,similarity:Belongs to the eukaryotic mitochondrial porin fami</u>
Subcellular Location :	<u>Mitochondrion outer membrane ; Multi-pass membrane protein . Cell membrane ; Multi-pass membrane protein . Membrane raft ; Multi-pass membrane protein .</u>
Expression :	<u>Expressed in erythrocytes (at protein level) (PubMed:27641616). Expressed in heart, liver and skeletal muscle (PubMed:8420959).</u>

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