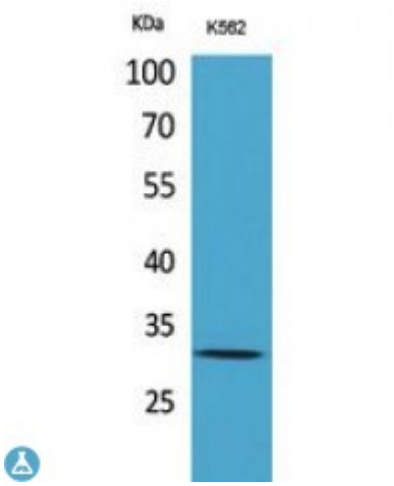
Anti-VDAC1 antibody



Description	Rabbit polyclonal to VDAC1.

Model	STJ96755
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human VDAC1.
Immunogen Region	1-50 aa, N-terminal
Gene ID	7416
Gene Symbol	VDAC1
Dilution range	WB 1:500-1:2000ELISA 1:20000
Specificity	VDAC1 Polyclonal Antibody detects endogenous levels of VDAC1 protein.
Tissue Specificity	Heart, liver and skeletal muscle.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Voltage-dependent anion-selective channel protein 1 VDAC-1 hVDAC1 Outer mitochondrial membrane protein porin 1 Plasmalemmal porin Porin 31HL Porin 31HM
Molecular Weight	31 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:12669OMIM:604492
Alternative Names	Voltage-dependent anion-selective channel protein 1 VDAC-1 hVDAC1 Outer mitochondrial membrane protein porin 1 Plasmalemmal porin Porin 31HL Porin 31HM
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 .
Sequence and Domain Family	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.
Cellular Localization	Mitochondrion outer membrane Cell membrane Membrane raft
Post-translational Modifications	Phosphorylation at Ser-193 by NEK1 promotes the open conformational state preventing excessive mitochondrial membrane permeability and subsequent apoptotic cell death after injury. Phosphorylation by the AKT-GSK3B axis stabilizes the protein probably by preventing ubiquitin-mediated proteasomal degradation. Ubiquitinated by PRKN during mitophagy, leading to its degradation and enhancement of mitophagy. Deubiquitinated by USP30.