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Rabbit Anti-VDAC antibody

SL1461R

Product Name:	VDAC
Chinese Name:	等电压依赖性阴离子通道抗体
Alias:	voltage-dependent anion channel; hVDAC1; MGC111064; Outer mitochondrial membrane protein porin 1; Plasmalemmal porin; Porin 31 HL; Porin 31HL; Porin 31HM; VDAC 1; VDAC; VDAC1; Voltage dependent anion channel 1; Voltage dependent anion selective channel protein 1; VTA1_HUMAN.
文献引用 PubMed :	**Specific References(4)**|SL1461R has been referenced in 4 publications. **[IF=7.69]**Manczak, Maria, and P. Hemachandra Reddy. "Abnormal interaction of VDAC1 with amyloid beta and phosphorylated tau causes mitochondrial dysfunction in Alzheimer's disease." Human molecular genetics 21.23 (2012): 5131-5146.**WB, IP;Human, Mouse**. PubMed:22926141 **[IF=2.08]**Xing, Wen Min, et al. "Proteomic identification of mitochondrial targets involved in andrographolide sodium bisulfite-induced nephrotoxicity in a rat model."Environmental Toxicology and Pharmacology (2015).**WB;Rat**. PubMed:26356389 **[IF=2.73]**Wang, Zhaoqi, et al. "Penehyclidine hydrochloride prevents anoxia/reoxygenation injury and induces H9c2 cardiomyocyte apoptosis via a mitochondrial pathway." European Journal of Pharmacology (2017).**WB;Rat**. PubMed:28089921 **[IF=1.35]**Hui, Yan, et al. "Resveratrol improves mitochondrial function in the remnant kidney from 5/6 nephrectomized rats." Acta Histochemica (2017).**WB;Rat**. PubMed:28434671

Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	32kDa
Cellular localization:	cytoplasmicThe cell membraneMitochondrion
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human VDAC:85-190/283
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Voltage dependent anion selective channel protein 1 (VDAC/Porin) belongs to the eukaryotic mitochondrial porin family and forms a channel through the mitochondrial outer membrane and also the plasma membrane. The channel allows diffusion of small hydrophilic molecules; 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. VDAC/Porin expression is observed in the heart,liver and skeletal muscle. **Function:** Involved in the endosomal multivesicular bodies (MVB) pathway. MVBs contain intraluminal vesicles (ILVs) that are generated by invagination and scission from the limiting membrane of the endosome and mostly are delivered to lysosomes enabling degradation of membrane proteins, such as stimulated growth factor receptors, lysosomal enzymes and lipids. Thought to be a cofactor of VPS4A/B, which catalyzes disassembles membrane-associated ESCRT-III assemblies. Involved in the sorting and down-regulation of EGFR (By similarity). Involved in HIV-1 budding. **Subunit:** Interacts with VPS4B. Interacts with CHMP1B. Interacts with CHMP2A; the interaction probably involves the open conformation of (polymerized) CHMP2A. May interact with CHMP3. Interacts with CHMP5; the interaction involves soluble CHMP5. Interacts with IST1. **Subcellular Location:** Cytoplasm. Endosome membrane; Peripheral membrane protein (Probable).

Similarity:
Belongs to the VTA1 family.

SWISS:
P21796

Gene ID:
7416

Database links:

Entrez Gene: 416320Chicken

Entrez Gene: 282119Cow

Entrez Gene: 7416Human

Entrez Gene: 22333Mouse

Entrez Gene: 397010Pig

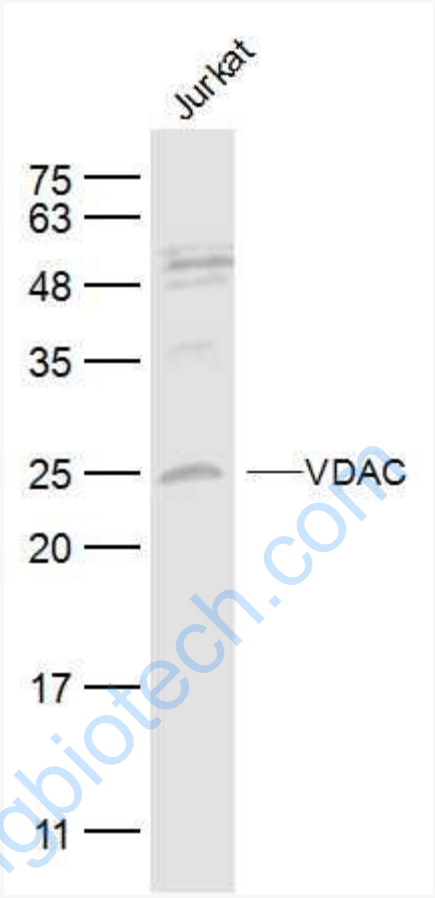
Entrez Gene: 83529Rat

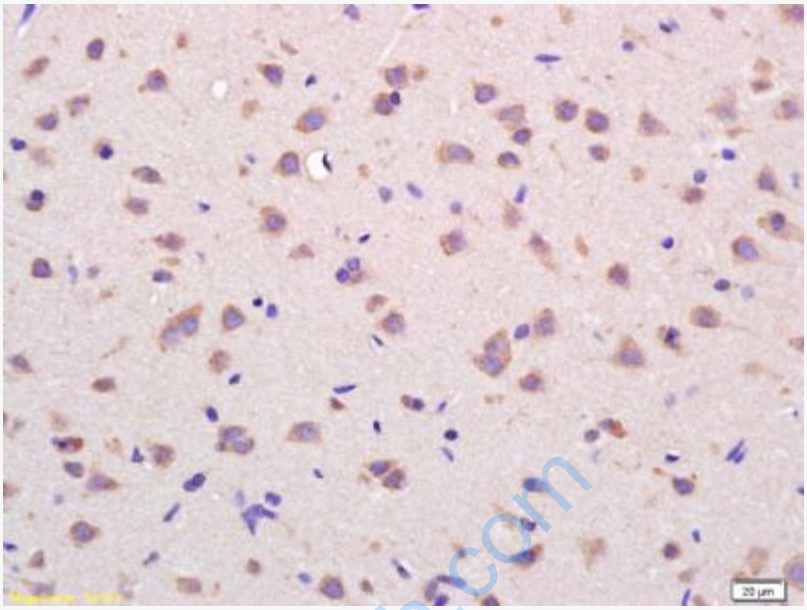
Entrez Gene: 334582Zebrafish

Omim: 604492Human

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

电压依赖性阴离子通道VDAC是存在于Mitochondrion外膜上的31kDa蛋白,能在膜上形成亲水性通道,调控阴离子、阳离子、ATP以及其他代谢物进出Mitochondrion,在调节细胞代谢、维持胞内钙稳态,调节Apoptosis和坏死等过程中发挥重要功能。

Picture:	 Sample: Jurkat(Human) Cell Lysate at 30 ug Primary: Anti-VDAC (SL1461R) at 1/500 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 32 kD Observed band size: 25 kD



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-VDAC Polyclonal Antibody, Unconjugated(SL1461R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining