

**Goat Anti-VDAC2 (Internal) Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF2143b

**Specification**

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**Goat Anti-VDAC2 (Internal) Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P45880</a>
Other Accession	<a href="#">NP_003366</a> , <a href="#">7417</a> , <a href="#">22334 (mouse)</a>
Reactivity	Human
Predicted	Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	31567

**Goat Anti-VDAC2 (Internal) Antibody - Additional Information**

**Gene ID** 7417

**Other Names**

Voltage-dependent anion-selective channel protein 2, VDAC-2, hVDAC2, Outer mitochondrial membrane protein porin 2, VDAC2

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-VDAC2 (Internal) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-VDAC2 (Internal) Antibody - Protein Information**

**Name** VDAC2 ([HGNC:12672](#))

**Function**

Non-selective voltage-gated ion channel that mediates the transport of anions and cations through the mitochondrion outer membrane and plasma membrane (PubMed:<a href="http://www.uniprot.org/citations/8420959" target="\_blank">8420959</a>). The channel adopts an open conformation at zero mV and a closed conformation at both positive and negative potentials (PubMed:<a href="http://www.uniprot.org/citations/8420959" target="\_blank">8420959</a>)

target="\_blank">8420959</a>). There are two populations of channels; the main that functions in a lower open-state conductance with lower ion selectivity, that switch, in a voltage-dependent manner, from the open to a low-conducting 'closed' state and the other that has a normal ion selectivity in the typical high conductance, 'open' state (PubMed:<a href="http://www.uniprot.org/citations/8420959" target="\_blank">8420959</a>). Binds various lipids, including the sphingolipid ceramide, the phospholipid phosphatidylcholine, and the sterols cholesterol and oxysterol (PubMed:<a href="http://www.uniprot.org/citations/31015432" target="\_blank">31015432</a>). Binding of ceramide promotes the mitochondrial outer membrane permeabilization (MOMP) apoptotic pathway (PubMed:<a href="http://www.uniprot.org/citations/31015432" target="\_blank">31015432</a>).

#### Cellular Location

Mitochondrion outer membrane. Membrane. Note=May localize to non-mitochondrial membranes.

#### Tissue Location

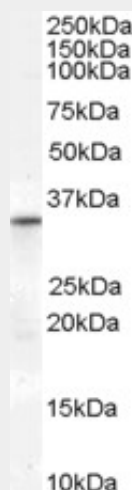
Expressed in erythrocytes (at protein level) (PubMed:27641616). Expressed in all tissues examined (PubMed:8420959)

### Goat Anti-VDAC2 (Internal) 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 Cytometry](#)
- [Cell Culture](#)

### Goat Anti-VDAC2 (Internal) Antibody - Images



AF2143b (0.3 µg/ml) staining of Human Heart lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### Goat Anti-VDAC2 (Internal) Antibody - Background

This gene encodes a member of the voltage-dependent anion channel pore-forming family of

proteins that are considered the main pathway for metabolite diffusion across the mitochondrial outer membrane. The encoded protein is also thought to be involved in the mitochondrial apoptotic pathway via regulation of BCL2-antagonist/killer 1 protein activity. Pseudogenes have been identified on chromosomes 1, 2, 12 and 21, and alternative splicing results in multiple transcript variants.

### **Goat Anti-VDAC2 (Internal) Antibody - References**

Characterization of human VDAC isoforms: A peculiar function for VDAC3? De Pinto V, et al. *Biochim Biophys Acta*, 2010 Jun-Jul. PMID 20138821.

Expression and localization of voltage-dependent anion channels (VDAC) in human spermatozoa. Liu B, et al. *Biochem Biophys Res Commun*, 2009 Jan 16. PMID 19013129.

VDAC2 and aldolase A identified as membrane proteins of K562 cells with increased expression under iron deprivation. Valis K, et al. *Mol Cell Biochem*, 2008 Apr. PMID 18278581.

The layered structure of human mitochondrial DNA nucleoids. Bogenhagen DF, et al. *J Biol Chem*, 2008 Feb 8. PMID 18063578.

High-level expression, refolding and probing the natural fold of the human voltage-dependent anion channel isoforms I and II. Engelhardt H, et al. *J Membr Biol*, 2007 Apr. PMID 17828567.