



Product Specification Sheet

VDAC1 antibody

Cat # VDAC51-A

Rabbit Anti-Arabidopsis Thaliana VDAC1 antibody

SIZE: 100 µg

The Voltage-Dependent Anion Channel 1 (also known as VDAC, VDAC1 or outer mitochondrial membrane protein porin 1) is the outer mitochondrial membrane receptor for hexokinase and BCL2L1. The VDAC proteins are thought to form aqueous channels, or pores, through which adenine nucleotides cross the outer mitochondrial membrane. VDACS have been implicated in the formation of the mitochondrial permeability transition pore complex in apoptotic cells. This complex, formed by VDAC, adenine nucleotide translocator (ANT), and cyclophilin D (CypD), is thought to allow the mitochondria to undergo metabolic uncoupling and irreversible morphologic changes that ultimately destroy the mitochondria during apoptosis. VDACS are highly expressed in heart, liver and skeletal muscle, where concentrations of mitochondria are at their highest.

Source of Antigen or Antibodies

Uniprot: Q9SRH5

Host: Rabbit

Clonality: Polyclonal

Purification: Ammonium sulfate followed by peptide affinity purification.

Immunogen: 20 amino acid synthetic peptide derived from the N terminus of Arabidopsis Thaliana N terminal region.

Cross reactivity: The peptide used as an immunogen exhibits 95% homology with Arabidopsis Lyrata. Capsella rubella, Camelina sativa, Raphanus sativus, Brassica rapa, Eutrema salsugineum, Trifolium pratense. 89% with Medicago truncatula, Sesamum indicum, Handroanthus impetiginosus, and Genlisea aurea, and Cice

Subcellular Location: Mitochondrion outer membrane

Alternative names: Voltage-dependent anion-selective channel protein 1

Recommended Secondary Antibody: Goat anti-Rabbit IgG-HRP (ADI cat#20320)

Form & Storage of Antibodies

Affinity pure IgG Solution

Concentration: 0.5 mg/ml Volume: 200 µl
Supplied in PBS, pH 7.4 + 0.1% BSA
The antibody can be made available carrier free or conjugated to HRP, Biotin, or FITC on request

Lyophilized powder

Reconstitute powder in 200 µl distilled water to 0.5 mg/ml

Storage:

Short-term: 4°C for 1 month

Long-term: at -20°C or below in suitable aliquots after reconstitution for 1 year. Do not expose to multiple free/thaw cycles or store working, diluted solutions. Glycerol may be added to a final concentration of 50% and antibodies can be stored un-aliquoted at -20°C.

Recommended Usage

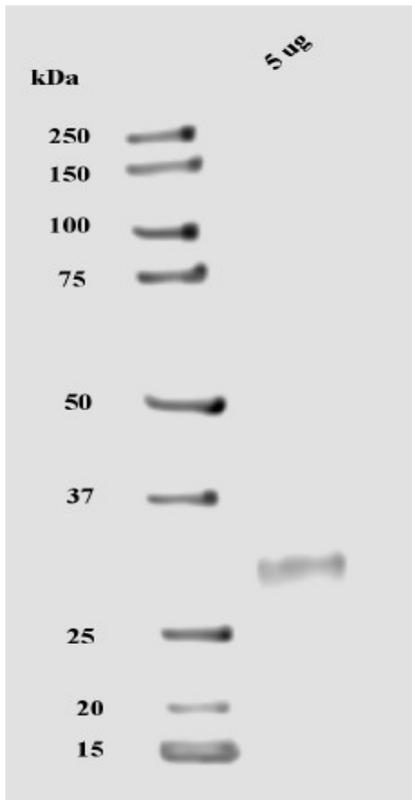
Western Blotting: 0.5-2.0 µg/ml

The above concentrations are a *suggestion*, user's must optimize their assay based on their own conditions. The antibody may work in other applications such as Immunofluorescence. These methods have not been tested by ADI.

**This product is for In vitro research use only.*

Related materials available from ADI

| Catalog# | Description |
|----------|--|
| VDAC11-A | Rabbit anti-Human VDAC1 antibody |
| VDAC31-A | Rabbit anti-Human Phospho VDAC1 (Ser193) antibody |
| BCL11-A | Rabbit Anti-Human BCL-2 antibody |
| BCL21-A | Rabbit Anti-Mouse BCL-2 antibody |
| BCL2-C | Recombinant BCL-2 control for Western blotting |
| BAX11-A | Rabbit anti-Human BAX antibody (N-terminus) antibody |
| BAX12-A | Rabbit anti-Human BAX antibody (Mid region) antibody |
| BAX21-A | Rabbit anti-Mouse BAX antibody (N-terminus) antibody |
| BAX22-A | Rabbit anti-Mouse BAX antibody (Mid region) antibody |
| VDAC51-A | 190225IA |



Western Blotting: 5 µg of an Arabidopsis thaliana lysate was heated for 5 minutes at 95°C then electrophoretically separated on a 10% SDS-PAGE gel. The gel was run for at 100V for ~1 hour and 30 minutes then transferred to a 0.2 µm nitrocellulose membrane using the 'Mixed MW' settings on a Transblot Turbo (Biorad). The blot was blocked for 1 hour at room temperature with 1% Casein. **VDAC51-A** was diluted with TBST+0.1% BSA to 1 µg/ml and incubated overnight at 4°C. The blot was washed with TBS-T 3 times for 5 minutes each. Goat anti-rabbit IgG HRP (**ADI cat#20320**) was diluted in TBST+0.1% BSA at a 1:10,000 dilution (50 ng/ml) then incubated for 1 hour at room temperature. The blot was washed 3 times with TBS-T for 5 minutes each. The blot was then incubated with ADI Femto ECL substrate (**ADI cat#80210**) for 5 minutes and imaged on a CCD imaging system (C-DiGit, LI-COR).