10320 Camino Santa Fe, Suite G
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VDAC3 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17092c

Specification

VDAC3 Antibody (Center) - Product Information

Application	**WB, IHC-P, IHC-P-Leica, FC,E**
Primary Accession	Q9Y277
Other Accession	Q9TT13, Q29380, Q60931, Q9MZ13, NP_005653.3, NP_001129166.1
Reactivity	**Human, Mouse, Rat**
Predicted	**Bovine, Pig, Rabbit**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**156-183**

VDAC3 Antibody (Center) - Additional Information

Gene ID 7419

Other Names
Voltage-dependent anion-selective channel protein 3, VDAC-3, hVDAC3, Outer mitochondrial membrane protein porin 3, VDAC3

Target/Specificity
This VDAC3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 156-183 amino acids from the Central region of human VDAC3.

Dilution
WB~~1:1000
IHC-P~~1:100
IHC-P-Leica~~1:500
FC~~1:25

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

Precautions
VDAC3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

VDAC3 Antibody (Center) - Protein Information

Name VDAC3

Function Forms a channel through the mitochondrial outer membrane that allows diffusion of small hydrophilic molecules (By similarity). Involved in male fertility and sperm mitochondrial sheath formation (By similarity).

Cellular Location
Mitochondrion outer membrane {ECO:0000250|UniProtKB:P21796}. Membrane Note=May localize to non-mitochondrial membranes

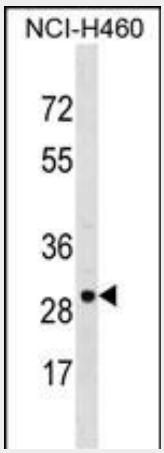
Tissue Location
Expressed in erythrocytes (at protein level) (PubMed:27641616). Widely expressed. Highest in testis (PubMed:9781040).

VDAC3 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

VDAC3 Antibody (Center) - Images



VDAC3 Antibody (Center) (Cat. #AP17092c) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the VDAC3 antibody detected the VDAC3 protein (arrow).

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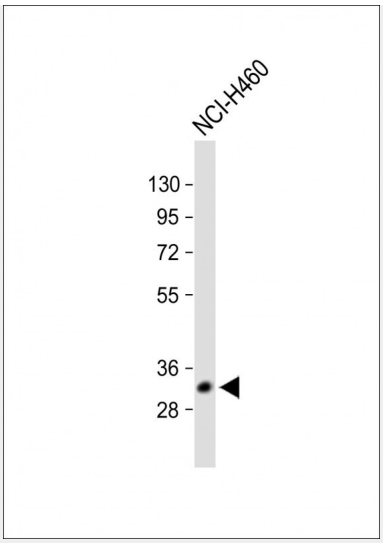
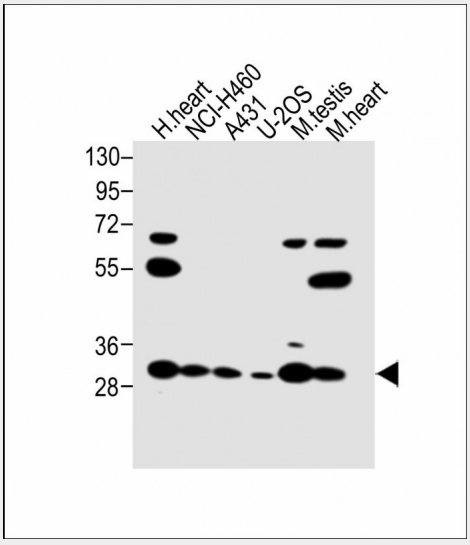


All lanes : Anti-VDAC3 Antibody (Center) at 1:1000 dilution Lane 1: Human heart lysate Lane 2: NCI-H460 whole cell lysate Lane 3: A431 whole cell lysate Lane 4: U-2OS whole cell lysate Lane 5: Mouse testis lysate Lane 6: Rat brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 31 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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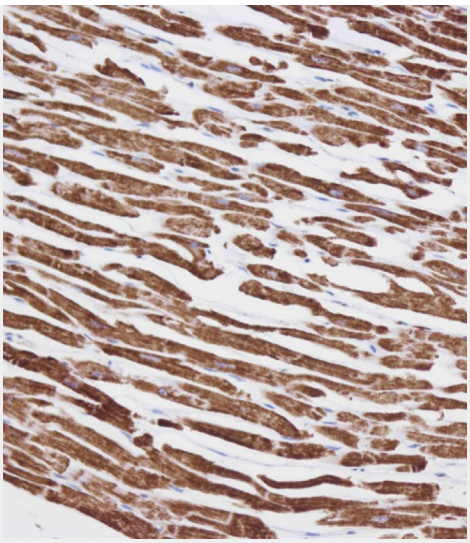
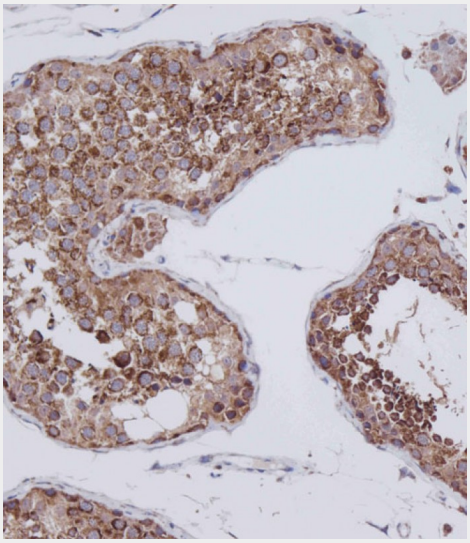


Immunohistochemical analysis of AP17092c on paraffin-embedded Human heart tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Immunohistochemical analysis of AP17092c on paraffin-embedded Human testis tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

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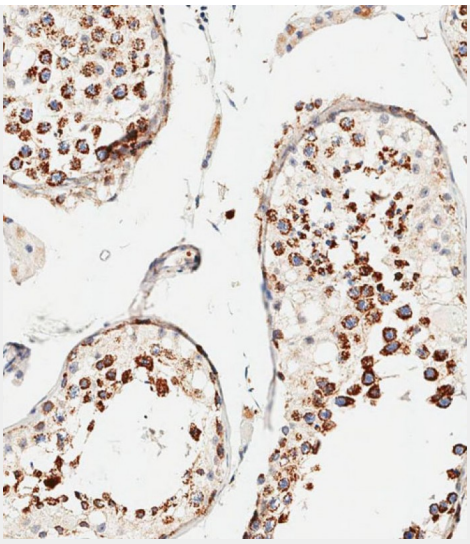
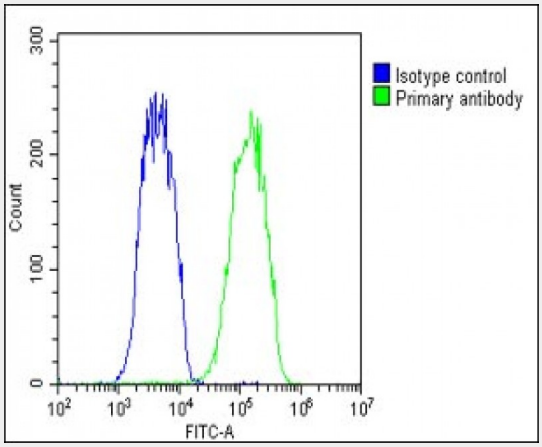


Immunohistochemical analysis of paraffin-embedded human testis tissue using AP17092c performed on the Leica® BOND RXm. Samples were incubated with primary antibody(1/500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Overlay histogram showing Hela cells stained with AP17092c(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP17092c, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

VDAC3 Antibody (Center) - Background

VDAC3 belongs to a group of mitochondrial membrane channels involved in translocation of adenine nucleotides through the outer membrane. These channels may also function as a mitochondrial binding site for hexokinase (see HK1; MIM 142600) and glycerol kinase (GK; MIM 300474) (Rahmani et al., 1998).[supplied by OMIM].

VDAC3 Antibody (Center) - References

Reina, S., et al. FEBS Lett. 584(13):2837-2844(2010)
Lefievre, L., et al. Proteomics 7(17):3066-3084(2007)
Lamesch, P., et al. Genomics 89(3):307-315(2007)
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :
Rush, J., et al. Nat. Biotechnol. 23(1):94-101(2005)

VDAC3 Antibody (Center) - Citations

- Changes in the mitochondrial protein profile due to ROS eruption during ageing of elm (Ulmus pumila L.) seeds.