

# VDAC Polyclonal Antibody

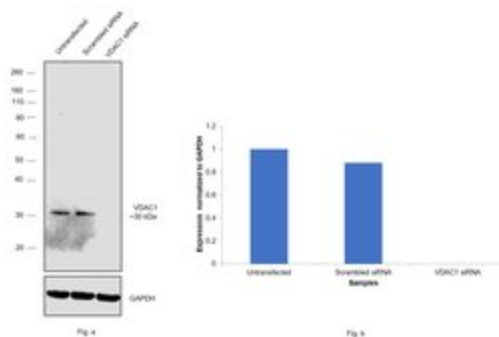
Product Details	
Size	100 µg
Species	Human, Mouse, Non-human primate, Rat
Published Species	Rat, Hamster, Bovine, Mouse, Human
Expression System	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic Peptide: C N(185) D G T E F G G S I Y Q K(197)
Form	Liquid
Concentration	1 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS with 1mg/mL BSA
Contains	0.05% sodium azide
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2304154

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC)	1:200-1:1000	1 Publication
Immunofluorescence (IF)	1:200-1:1000	2 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:200-1:1000	-
Western Blot (WB)	2 µg/mL	30 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunohistochemistry (IHC)	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

## Product Specific Information

PA1-954A detects voltage-dependent anion channel (VDAC) from human, non-human primates, mouse, and rat samples. PA1-954A has been successfully used in IF/ICC, IHC (P) and Western blot procedures. By Western blot, this antibody detects a single, prominent ~31 kDa band representing VDAC from rat heart extract. PA1-954A immunizing peptide corresponds to the C-terminal amino acid residues 185-197 of human VDAC3. This sequence is completely conserved between isoforms 1, 2 and 3 of human VDAC and PA1-954A detects endogenous levels of total VDAC. PA1-954A immunizing peptide (Cat. # PEP-082) is available for use in neutralization and control experiments.

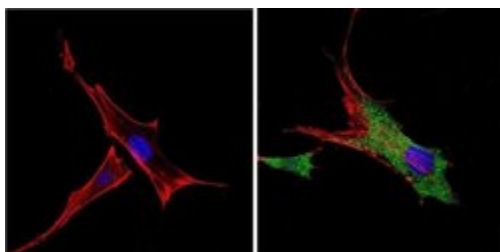
## Advanced Verification Data



### VDAC Antibody (PA1-954A)

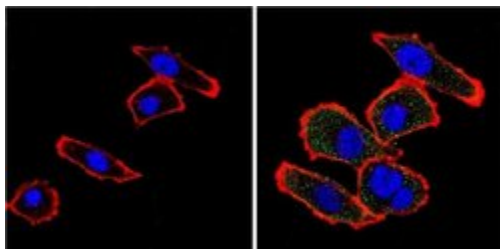
Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. U-87 MG cells were transfected with VDAC siRNA and decrease in signal intensity was observed in Western Blot application using Anti-VDAC Polyclonal Antibody (Product # PA1-954A). Knockdown validation info.

## Product Images For VDAC Polyclonal Antibody



### VDAC Antibody (PA1-954A) in IF

Immunofluorescent analysis of VDAC (green) showing positive staining in the cytoplasm of NIH-3T3 cells (right) compared with a negative control in the absence of primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes, blocked with 3% BSA-PBS for 30 minutes at room temperature and probed with a VDAC polyclonal antibody (Product # PA1-954A) in 3% BSA-PBS at a dilution of 1:200 and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 488-conjugated goat-anti-rabbit IgG secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with DAPI for 5-10 minutes in the dark. Images were taken at a magnification of 60x.



### VDAC Antibody (PA1-954A) in IF

Immunofluorescent analysis of VDAC (green) showing positive staining in the cytoplasm of U-251 cells (right) compared with a negative control in the absence of primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes, blocked with 3% BSA-PBS for 30 minutes at room temperature and probed with a VDAC polyclonal antibody (Product # PA1-954A) in 3% BSA-PBS at a dilution of 1:200 and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 488-conjugated goat-anti-rabbit IgG secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with DAPI for 5-10 minutes in the dark. Images were taken at a magnification of 60x.

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## 36 References

### Western Blot (30)

#### Molecular biology of the cell

#### Identification of a mitofusin specificity region that confers unique activities to Mfn1 and Mfn2.

"PA1-954A was used in Western Blotting to propose that MISR functions in higher order oligomerization either directly, as an interaction interface, or indirectly through conformational changes."

Authors: Sloat SR,Whitley BN,Engelhart EA,Hoppins S

**Species**  
Mouse

**Dilution**  
1:1,000

**Year**  
2019

#### Cells

#### 3,5 Diiodo-L-Thyronine (T) Promotes the Browning of White Adipose Tissue in High-Fat Diet-Induced Overweight Male Rats Housed at Thermoneutrality.

"PA1-954A was used in Western Blotting to test whether, in an animal model of fat accumulation, 3,5 diiodo-L-thyronine has the potential to activate a browning process and to explore the underlying mechanism."

Authors: Senese R,Cioffi F,De Matteis R,Petito G,de Lange P,Silvestri E,Lombardi A,Moreno M,Goglia F,Lanni A

**Species**  
Rat

**Dilution**  
1:1,000

**Year**  
2019

[View more WB references on thermofisher.com](#)

### Immunocytochemistry (1)

#### Endocrinology

#### Hepatic HKDC1 Expression Contributes to Liver Metabolism.

"Published figure using VDAC polyclonal antibody (Product # PA1-954A) in Immunofluorescence"

Authors: Pusec CM,De Jesus A,Khan MW,Terry AR,Ludvik AE,Xu K,Giancola N,Pervaiz H,Daviau Smith E,Ding X,Harrison S,Chandel NS,Becker TC,Hay N,Ardehali H,Cordoba-Chacon J,Layden BT

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2019

### Immunofluorescence (2)

#### Endocrinology

#### Hepatic HKDC1 Expression Contributes to Liver Metabolism.

"Published figure using VDAC polyclonal antibody (Product # PA1-954A) in Immunofluorescence"

Authors: Pusec CM,De Jesus A,Khan MW,Terry AR,Ludvik AE,Xu K,Giancola N,Pervaiz H,Daviau Smith E,Ding X,Harrison S,Chandel NS,Becker TC,Hay N,Ardehali H,Cordoba-Chacon J,Layden BT

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2019

### More applications with references on thermofisher.com

Misc (1)

IHC (F) (1)

IHC (1)

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