

## VDAC1/Porin Monoclonal antibody

Catalog Number: 66345-1-Ig 23 Publications

## Basic Information

<b>Catalog Number:</b> 66345-1-Ig	<b>GenBank Accession Number:</b> NM_003374	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 7416	<b>CloneNo.:</b> 1E2C7
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P21796	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:500-1:2000
<b>Isotype:</b> IgG3	<b>Full Name:</b> voltage-dependent anion channel 1	
	<b>Calculated MW:</b> 31 kDa	
	<b>Observed MW:</b> 35-37 kDa	

## Applications

<b>Tested Applications:</b> IHC, WB, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> CoIP, IF, IHC, IP, WB	<b>WB :</b> MDA-MB-231 cells, HeLa cells, LNCaP cells, HEK-293 cells, Jurkat cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells, RAW264.7 cells
<b>Species Specificity:</b> human, mouse, rat	<b>IHC :</b> human heart tissue, mouse skeletal muscle tissue
<b>Cited Species:</b> human, rat, mouse, pig	

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

VDAC1, also named as VDAC, porin 31HM, porin 31HL and plasmalemmal porin, belongs to the eukaryotic mitochondrial porin family. It adopts an open conformation at low or zero membrane potential and a closed conformation at potentials above 30-40 mV, to form a channel through the mitochondrial outer membrane and also the plasma membrane. Unlike other membrane transport proteins, porins are large enough to allow passive diffusion. Studies have shown that VDAC1 is subject to both phosphorylation and acetylation (PMID: 23233904). The apparent molecular weight of VDAC1 is 30-37 kDa (PMID: 14573604; 23754752; 25681439). Hypoxic conditions were found to trigger cleavage of the VDAC1 C-terminal to yield a 26-kDa truncated but active form (PMID: 22389449; 23233904).

## Notable Publications

Author	Pubmed ID	Journal	Application
Yingyi Duan	36197105	J Virol	IF
Zhiguo Li	30458278	Free Radic Biol Med	WB
Hanzhou Li	36425593	J Diabetes Res	WB, IF

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

**Aliquoting is unnecessary for -20°C storage**

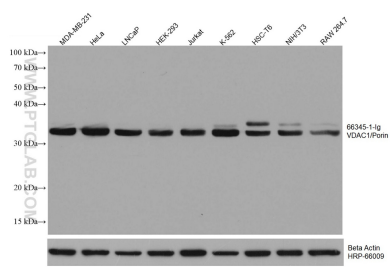
For technical support and original validation data for this product please contact:

T: 4006900926

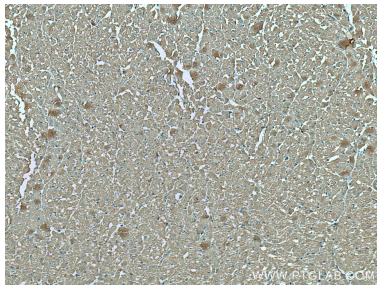
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

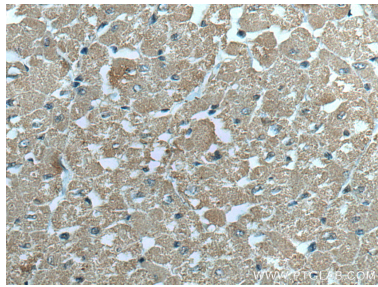
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66345-1-Ig (VDAC1/Porin antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Beta Actin Monoclonal antibody (HRP-66009) as loading control.



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66345-1-Ig (VDAC1/Porin antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 66345-1-Ig (VDAC1/Porin antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).