

VDAC1/Porin Monoclonal antibody

Catalog Number: 66345-1-Ig **35 Publications**

Basic Information

Catalog Number: 66345-1-Ig	GenBank Accession Number: NM_003374	Purification Method: Protein A purification
Size: 150ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 7416	CloneNo.: 1E2C7
Source: Mouse	UNIPROT ID: P21796	Recommended Dilutions: WB 1:5000-1:50000 IF-P 1:200-1:800
Isotype: IgG3	Full Name: voltage-dependent anion channel 1	
	Calculated MW: 31 kDa	
	Observed MW: 35-37 kDa	

Applications

Tested Applications: WB, IF-P, FC (Intra), ELISA	Positive Controls:
Cited Applications: WB, IHC, IF, IP, CoIP	WB : 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
Species Specificity: human, mouse, rat	IF-P : mouse liver tissue,
Cited Species: human, mouse, rat, pig	

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, pH7.3

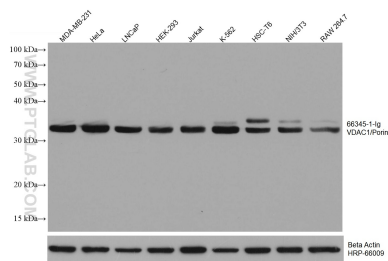
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

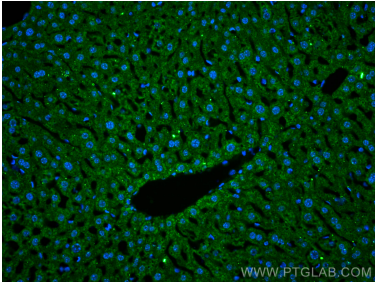
For technical support and original validation data for this product please contact:
 T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
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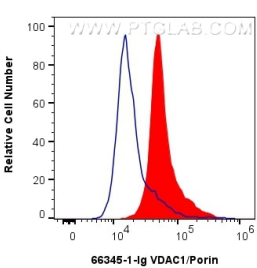
Selected Validation Data



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.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse liver tissue using VDAC1/Porin antibody (66345-1-Ig, Clone: 1E2C7) at dilution of 1:400 and Multi-rAb CoraLite® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10⁶ HepG2 cells were intracellularly stained with 0.8 ug VDAC1/Porin Monoclonal antibody (66345-1-Ig, Clone:1E2C7) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1)(red), or 0.8 ug Mouse IgG3 isotype control Mouse McAb (66360-4-Ig, Clone: 1H4A5) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).