For Research Use Only

VDAC1/Porin Monoclonal antibody

Catalog Number:66345-1-Ig 34 Publications

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Basic Information

Catalog Number:
66345-1-Ig

Concentration:
1000 ug/ml

Source:
Mouse

Isotype:
IgG3

GenBank Accession Number:
NM_003374

GeneID (NCBI):
7416

UNIPROT ID:
P21796

Full Name:
voltage-dependent anion channel 1

Calculated MW:
31 kDa

Observed MW:
35-37 kDa

Purification Method:
Protein A purification

CloneNo.:
1E2C7

Recommended Dilutions:
WB 1:5000-1:50000
IF-P 1:200-1:800

Applications

Tested Applications:
WB, IF-P, FC (Intra), ELISA

Cited Applications:
WB, IHC, IF, IP, CoIP

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat, pig

Positive Controls:

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

IF-P : mouse liver tissue,

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

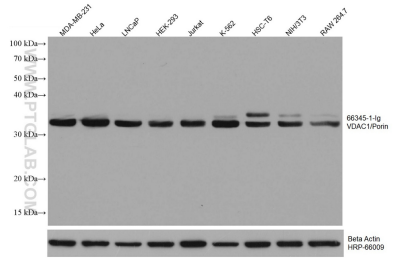
Author	Pubmed ID	Journal	Application
Yingyi Duan	36197105	J Virol	IF
Zhiguo Li	30458278	Free Radic Biol Med	WB
Hanzhou Li	36425593	J Diabetes Res	WB,IF

Storage

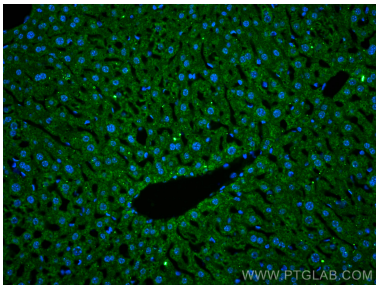
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

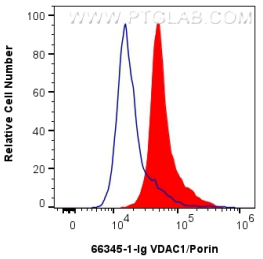
Selected Validation Data



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).



1x10^6 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).