For Research Use Only

VDAC1/Porin Recombinant antibody

Catalog Number:81538-1-RR 3 Publications

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Basic Information

Catalog Number:
81538-1-RR

Size:
100ul , Concentration: 500 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_003374

GeneID (NCBI):
7416

UNIPROT ID:
P21796

Full Name:
voltage-dependent anion channel 1

Calculated MW:
31 kDa

Observed MW:
31 kDa

Purification Method:
Protein A purification

CloneNo.:
2F4

Recommended Dilutions:
WB 1:2000-1:10000
IHC 1:500-1:2000
IF-P 1:50-1:500

Applications

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

Cited Applications:
WB, IP

Species Specificity:
human, mouse, rat

Cited Species:
mouse, rat

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

Positive Controls:

WB : MDA-MB-231 cells, HeLa cells, LNCaP cells, Jurkat cells, K-562 cells, NIH/3T3 cells, HSC-T6 cells

IHC : mouse liver tissue,

IF-P : human 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). This antibody is specific to VDAC1.

Notable Publications

Author	Pubmed ID	Journal	Application
Jingjing Liu	36587874	J Nutr Biochem	WB
Juanlan Xiao	39916296	Phytother Res	WB,IP
Zhenkang Liang	39558916	Int J Nanomedicine	WB

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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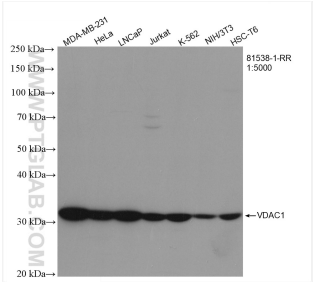
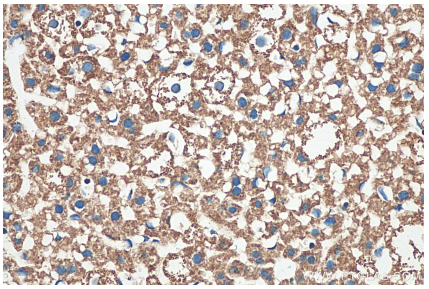
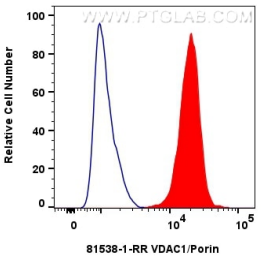
Selected Validation Data



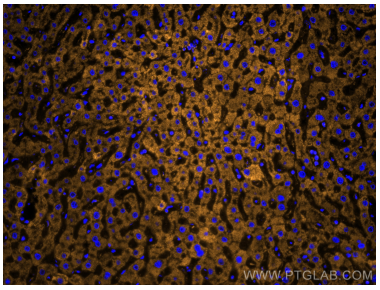
Various lysates were subjected to SDS PAGE followed by western blot with 81538-1-RR (VDAC1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 81538-1-RR (VDAC1/Porin antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10^6 HepG2 cells were intracellularly stained with 0.25 ug VDAC1/Porin Recombinant antibody (81538-1-RR, Clone:2F4) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed human liver tissue using VDAC1/Porin antibody (81538-1-RR, Clone: 2F4) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).