

For Research Use Only

VDAC1/2 Polyclonal antibody

Catalog Number: 10866-1-AP

Featured Product

186 Publications



Basic Information

Catalog Number:

10866-1-AP

Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1144

GenBank Accession Number:

BC008482

GeneID (NCBI):

7416

UNIPROT ID:

P21796

Full Name:

voltage-dependent anion channel 1

Calculated MW:

31 kDa

Observed MW:

31 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:500-1:3000

IHC: 1:50-1:500

IF-P: 1:200-1:800

IF-Fro: 1:50-1:500

FC (Intra): 0.80 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF-P, IF-Fro, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF, ColP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, rabbit, monkey, zebrafish, pieris rapae

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: HEK-293 cells, mouse kidney tissue, 4T1 cells, Jurkat cells, C6 cells, rat kidney tissue, MCF-7 cells, MDA-MB-453s cells

IHC: human colon tissue, mouse heart tissue

IF-P: mouse liver tissue, human liver cancer tissue

IF-Fro: mouse liver tissue,

FC (Intra): HepG2 cells,

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 polyclonal antibody raised against full-length human VDAC1 protein can cross react with VDAC2.

Notable Publications

Author	Pubmed ID	Journal	Application
Han Liao	26415619	Chem Biol Interact	WB
Junjun Zhou	32942015	Pharmacol Res	WB
Jingyao Li	36089186	Kidney Int	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

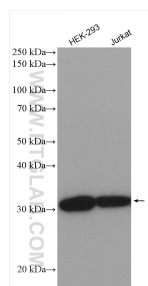
For technical support and original validation data for this product please contact:

T: 1(888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

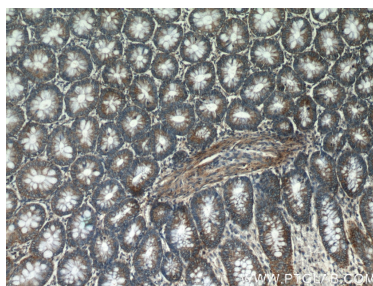
E: proteintech@ptglab.com
W: ptglab.com

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

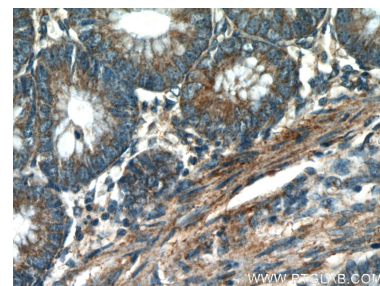
Selected Validation Data



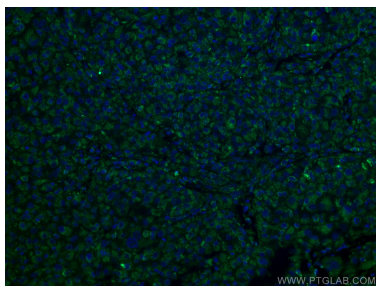
Various lysates were subjected to SDS PAGE followed by western blot with 10866-1-AP (VDAC1/2 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



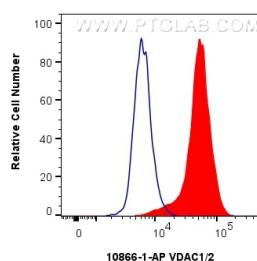
Immunohistochemical analysis of paraffin-embedded human colon using 10866-1-AP (VDAC1 antibody) at dilution of 1:50 (under 10x lens).



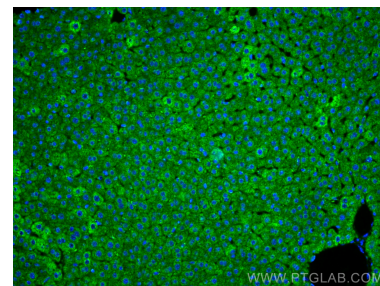
Immunohistochemical analysis of paraffin-embedded human colon using 10866-1-AP (VDAC1 antibody) at dilution of 1:50 (under 40x lens).



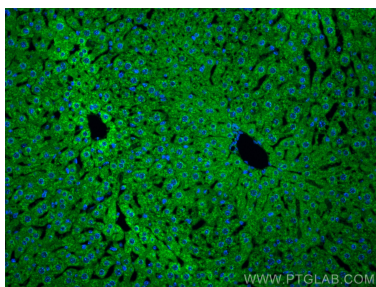
Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using 10866-1-AP (VDAC1/2 antibody) at dilution of 1:100 and CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



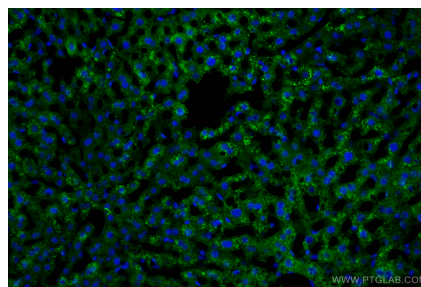
1x10⁶ HepG2 cells were intracellularly stained with 0.8 ug VDAC1/2 Polyclonal antibody (10866-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.8 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse liver tissue using VDAC1/2 antibody (10866-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse liver tissue using VDAC1/2 antibody (10866-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse liver tissue using 10866-1-AP (VDAC1/2 antibody) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).