ARG22249
anti-VDAC1 / Porin antibody [S152B-23]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [S152B-23] recognizes VDAC1 / Porin
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Specificity	Detects ~30kDa. Does not cross-react with VDAC2 or VDAC3 (based on KO validation results).
Host	Mouse
Clonality	Monoclonal
Clone	S152B-23
Isotype	IgG2a
Target Name	VDAC1
Species	Human
Immunogen	Full-length (aa. 1-283) fusion protein of Human VDAC1. Mouse: 98% identity (279/283 around aa. identical). Rat: 98% identity (279/283 around aa. identical); >60% identity with VDAC2 and VDAC3.
Conjugation	Un-conjugated
Alternate Names	VDAC1; Voltage Dependent Anion Channel 1; PORIN; Voltage-Dependent Anion-Selective Channel Protein 1; Outer Mitochondrial Membrane Protein Porin 1; Plasmalemmal Porin; Porin 31HL; Porin 31HM; MGC111064; VDAC-1; Sperm Binding Protein 1a; HVDAC1; VDAC

Application Instructions

Application table

Application	Dilution
ICC/IF	Assay-dependent
IHC-P	Assay-dependent
WB	1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.1% Sodium azide and 50% Glycerol
Preservative	0.1% Sodium azide
Stabilizer	50% Glycerol

Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

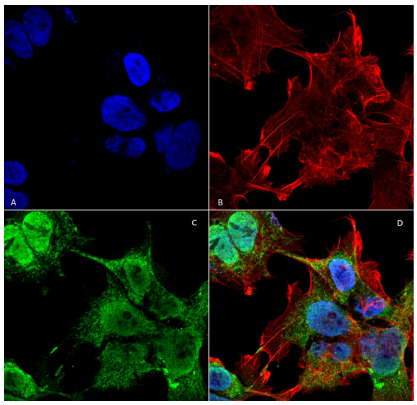
Bioinformation

Gene Symbol	VDAC1
Gene Full Name	voltage-dependent anion channel 1
Background	This gene encodes a voltage-dependent anion channel protein that is a major component of the outer mitochondrial membrane. The encoded protein facilitates the exchange of metabolites and ions across the outer mitochondrial membrane and may regulate mitochondrial functions. This protein also forms channels in the plasma membrane and may be involved in transmembrane electron transport. Alternate splicing results in multiple transcript variants. Multiple pseudogenes of this gene are found on chromosomes 1, 2 3, 6, 9, 12, X and Y.[provided by RefSeq, Sep 2010]
Function	Forms a channel through the mitochondrial outer membrane and also the plasma membrane. The channel at the outer mitochondrial membrane allows diffusion of small hydrophilic molecules; in the plasma membrane it is involved in cell volume regulation and apoptosis. It adopts an open conformation at low or zero membrane potential and a closed conformation at potentials above 30-40 mV. The open state has a weak anion selectivity whereas the closed state is cation-selective. [UniProt]
Research Area	Controls and Markers antibody; Metabolism antibody; Signaling Transduction antibody
Calculated Mw	31 kDa
PTM	Acetylation, Isopeptide bond, Phosphoprotein, Ubl conjugation. [UniProt]
Cellular Localization	Cell membrane, Membrane, Mitochondrion, Mitochondrion outer membrane. [UniProt]

Images

ARG22249 anti-VDAC1 / Porin antibody [S152B-23] WB image

Western blot: 20 µg of MCF7 cell lysate stained with ARG22249 anti-VDAC1 / Porin antibody [S152B-23] at 1:1000 dilution.



ARG22249 anti-VDAC1 / Porin antibody [S152B-23] ICC/IF image

Immunofluorescence: Human Neuroblastoma cell line SK-N-BE. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: ARG22249 anti-VDAC1 / Porin antibody [S152B-23] at 1:100 for 60 min at RT. Secondary Antibody: Goat anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) ARG22249 anti-VDAC1 / Porin antibody [S152B-23] (D) Composite.