VDAC1 (B-6): sc-390996

**BACKGROUND**

Adenine nucleotide translocator (ANT) and the voltage-dependent anion-selective channel proteins 1 and 2 (VDAC1 and VDAC2) are components of the permeability transition pore complex (PTPC) of the mitochondrial inner and outer membranes, respectively. Formation of PTPCs, the subsequent dissipation of mitochondrial inner membrane potential and release of cytochrome c through the outer mitochondrial membrane are critical events in the early stages of apoptosis. Bax, a proapoptotic protein, has been shown to act upon ANT to induce the dissipation of mitochondrial inner membrane potential.

**CHROMOSOMAL LOCATION**

Genetic locus: VDAC1 (human) mapping to 5q31.1; Vdac1 (mouse) mapping to 11 B1.3.

**SOURCE**

VDAC1 (B-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 118-157 within an internal region of VDAC1 of human origin.

**PRODUCT**

Each vial contains 200 μg IgG κ light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

VDAC1 (B-6) is available conjugated to agarose (sc-390996 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390996 HRP), 200 μg/ml, for WB, IHC(PE) and ELISA; to either phycoerythrin (sc-390996 PE), fluorescein (sc-390996 FITC), Alexa Fluor® 488 (sc-390996 AF488), Alexa Fluor® 546 (sc-390996 AF546), Alexa Fluor® 594 (sc-390996 AF594) or Alexa Fluor® 647 (sc-390996 AF647), 200 μg/ml, for WB (RGB), IHC(PE) and FC; and to either Alexa Fluor® 680 (sc-390996 AF680) or Alexa Fluor® 790 (sc-390996 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IHC(PE) and FC.

Blocking peptide available for competition studies, sc-390996 P (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

VDAC1 (B-6) is recommended for detection of VDAC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

VDAC1 (B-6) is also recommended for detection of VDAC1 in additional species, including avian.

Suitable for use as control antibody for VDAC1 siRNA (h): sc-42355, VDAC1 siRNA (m): sc-42356, VDAC1 shRNA Plasmid (h): sc-42355-SH, VDAC1 shRNA Plasmid (m): sc-42356-SH, VDAC1 shRNA (h) Lentiviral Particles: sc-42355-V and VDAC1 shRNA (m) Lentiviral Particles: sc-42356-V.

Molecular Weight of VDAC1: 30-35 kDa.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

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