IK1 (D-5): sc-365265

BACKGROUND
The intermediate conductance calcium-activated potassium channel protein 4 (SK4 or IK1) is a member of the KCNN family of potassium channels. IK1 is an integral membrane protein that functions in a variety of physiological functions. Activation of the IK1 channel is induced by intracellular calcium levels and regulated by calmodulin.

CHROMOSOMAL LOCATION
Gene tic locus: KCNN4 (human) mapping to 19q13.31; Kcnn4 (mouse) mapping to 7 A3.

SOURCE
IK1 (D-5) is a mouse monoclonal antibody raised against amino acids 308-427 mapping at the C-terminus of IK1 of human origin.

PRODUCT
Each vial contains 200 µg IgG; kappa light chain in 1.0 mL of PBS with < 0.1% sodium azide and 0.1% gelatin.

IK1 (D-5) is available conjugated to agarose (sc-365265 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365265 HRP), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either phycoerythrin (sc-365265 PE), fluorescein (sc-365265 FITC), Alexa Fluor® 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 546 (sc-365265 AF546), Alexa Fluor® 680 (sc-365265 AF680), Alexa Fluor® 647 (sc-365265 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 790 (sc-365265 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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

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

APPLICATIONS
IK1 (D-5) is recommended for detection of IK1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IK1 siRNA (h): sc-72200, IK1 shRNA Plasmid (m): sc-72201, IK1 shRNA Plasmid (m): sc-72200-SH, IK1 shRNA Plasmid (m): sc-72201-SH, IK1 shRNA (h) Lentiviral Particles: sc-72200-V and IK1 shRNA (m) Lentiviral Particles: sc-72201-V.

Molecular Weight of IK1: 45 kDa.

Positive Controls: DU 145 cell lysate: sc-2268, HeLa whole cell lysate: sc-2200 or HCT-116 whole cell lysate: sc-364175.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG BP-HRP or m-IgG BP-HRP (Cruz Marker); sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG AX BP-FITC: sc-516140 or m-IgG BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA

SELECT PRODUCT CITATIONS

PROTOCOLS
See our web site at www.scbt.com for detailed protocols and support products.