

IK1 (F-15): sc-27080

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.

REFERENCES

1. Warth, R., et al. 1999. Molecular and functional characterization of the small Ca^{2+} -regulated K^+ channel (rSK4) of colonic crypts. *Pflugers Arch.* 438: 437-444.
2. von Hahn, T., et al. 2001. Characterisation of the rat SK4/IK1 K^+ channel. *Cell. Physiol. Biochem.* 11: 219-230.

CHROMOSOMAL LOCATION

Genetic locus: KCNN4 (human) mapping to 19q13.31; Kcnn4 (mouse) mapping to 7 A3.

SOURCE

IK1 (F-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of IK1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-27080 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

IK1 (F-15) is recommended for detection of IK1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

IK1 (F-15) is also recommended for detection of IK1 in additional species, including canine, bovine and porcine.

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

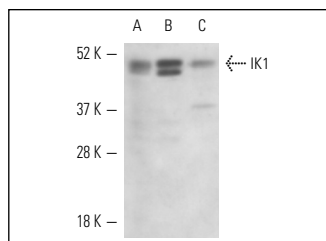
Molecular Weight of IK1: 45 kDa.

Positive Controls: COLO 320DM cell lysate: sc-2226, NRK whole cell lysate: sc-364197 or HCT-116 whole cell lysate: sc-364175.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



IK1 (F-15): sc-27080. Western blot analysis of IK1 expression in COLO 320DM (A), NRK (B) and HCT-116 (C) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Lam, R.S., et al. 2009. Cholesterol-dependent regulation of adenosine A(2A) receptor-mediated anion secretion in colon epithelial cells. *Exp. Cell Res.* 315: 3028-3035.

STORAGE

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

PROTOCOLS

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



Try **IK1 (D-5): sc-365265**, our highly recommended monoclonal alternative to IK1 (F-15).