

# KCNF1 (N-14): sc-168238

## BACKGROUND

KCNF1 (potassium voltage-gated channel subfamily F member 1) is a multi-pass membrane-bound protein that acts as an ion channel and is generally expressed as a heterotetramer of potassium channeling proteins. Formerly known as KH1, KCNF1 is usually found as a heteromer with three other potassium channel proteins, KCNG3, KV6.3 and KCNV2. As a potassium channel protein, KCNF1 plays a role in regulating apoptosis and proliferation of pulmonary artery smooth muscle (PASM) cells. Bone morphogenetic proteins (BMPs) restrict proliferation and can induce apoptosis in normal human PASM cells and will upregulate expression of KCNF1 in PASM cells *in vitro*. KCNF1 is expressed in heart, brain, liver, skeletal muscle, kidney and pancreas.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: KCNF1 (human) mapping to 2p25.1; *Kcnf1* (mouse) mapping to 12 A1.1.

## SOURCE

KCNF1 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal cytoplasmic domain of KCNF1 of human origin.

## STORAGE

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

## 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-168238 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

KCNF1 (N-14) is recommended for detection of KCNF1 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).

KCNF1 (N-14) is also recommended for detection of KCNF1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for KCNF1 siRNA (h): sc-94734, KCNF1 siRNA (m): sc-146358, KCNF1 shRNA Plasmid (h): sc-94734-SH, KCNF1 shRNA Plasmid (m): sc-146358-SH, KCNF1 shRNA (h) Lentiviral Particles: sc-94734-V and KCNF1 shRNA (m) Lentiviral Particles: sc-146358-V.

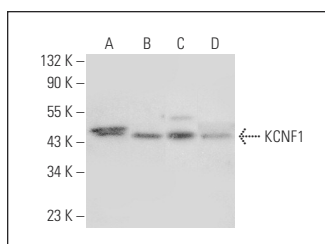
Molecular Weight of KCNF1: 56 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or Sol8 cell lysate: sc-2249.

## 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



KCNF1 (N-14): sc-168238. Western blot analysis of KCNF1 expression in HeLa (A), Jurkat (B), Sol8 (C) and c4 (D) whole cell lysates.

## RESEARCH USE

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