

KCNF1 (56-I): sc-81881

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.

SOURCE

KCNF1 (56-I) is a mouse monoclonal antibody raised against recombinant KCNF1 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

KCNF1 (56-I) is recommended for detection of KCNF1 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

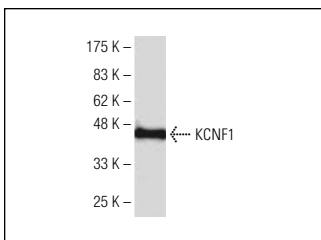
Molecular Weight of KCNF1: 56 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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).

DATA



KCNF1 (56-I): sc-81881. Western blot analysis of KCNF1 expression in HeLa whole cell lysate.

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.

PROTOCOLS

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