



KPI-2 (S-19): sc-79558

BACKGROUND

KPI-2 (kinase/phosphatase/inhibitor 2), also known as BREK, LMR2, cprk, AATYK2 or LMTK2 (lemur tyrosine kinase 2), is a 1,503 amino acid single-pass membrane protein belonging to the protein kinase superfamily and the protein tyrosine kinase family. Mainly expressed in skeletal muscle, and weakly in brain and pancreas, KPI-2 contains N-terminal transmembrane helices and a long C-terminal cytoplasmic tail with serine/threonine/tyrosine kinase activity. KPI-2 may be involved in nerve growth factor (NGF)-TrkA signaling, endosomal membrane trafficking and spermatogenesis. KPI-2 localizes to cytoplasmic membrane vesicles and to perinuclear recycling endosomes. KPI-2 is critical for the transition of endocytosed membrane vesicles from early endosomes to recycling endosomes. The gene encoding KPI-2 is a potential therapeutic target for prostate cancer.

REFERENCES

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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.

CHROMOSOMAL LOCATION

Genetic locus: LMTK2 (human) mapping to 7q21.3; Lmtk2 (mouse) mapping to 5 G2.

SOURCE

KPI-2 (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of KPI-2 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-79558 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KPI-2 (S-19) is recommended for detection of KPI-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 KPI-2 siRNA (h): sc-75397, KPI-2 siRNA (m): sc-75398, KPI-2 shRNA Plasmid (h): sc-75397-SH, KPI-2 shRNA Plasmid (m): sc-75398-SH, KPI-2 shRNA (h) Lentiviral Particles: sc-75397-V and KPI-2 shRNA (m) Lentiviral Particles: sc-75398-V.

Molecular Weight of KPI-2: 250 kDa.

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) 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.

RESEARCH USE

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

PROTOCOLS

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