SANTA CRUZ BIOTECHNOLOGY, INC.

KIF2B (P-18): sc-160473

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The kinesins constitute a large family of microtubule-dependent motor proteins, which are responsible for the distribution of numerous organelles, vesicles and macromolecular complexes throughout the cell. Individual kinesin members play crucial roles in cell division, intracellular transport and membrane trafficking events including endocytosis and transcytosis. KIF2B (kinesin family member 2B) is a 673 amino acid cytoplasmic protein that localizes to the kinetochore. Highly expressed in lung and ovary with moderate expression in heart, kidney, placenta skeletal muscle and spleen, KIF2B has microtubule depolymerization activity and is associated with peripheral translocation of lysosomes. Overexpression of KIF2B in cells result in abnormally large lysosome size and unusual positioning, which is some distance from their usual perinuclear location. KIF2B activity is critical for spindle assembly and chromosome movement.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Kif2b (mouse) mapping to 11 D.

SOURCE

KIF2B (P-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KIF2B of mouse 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-160473 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

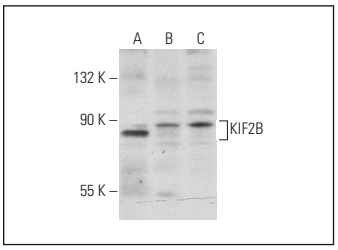
KIF2B (P-18) is recommended for detection of KIF2B of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with KIF2C.

Suitable for use as control antibody for KIF2B siRNA (m): sc-146475, KIF2B shRNA Plasmid (m): sc-146475-SH and KIF2B shRNA (m) Lentiviral Particles: sc-146475-V.

Molecular Weight of KIF2B: 75-80 kDa.

Positive Controls: CHO-K1 cell lysate: sc-3809, 3T3-L1 cell lysate: sc-2243 or B16-F0 cell lysate: sc-2298.

DATA



KIF2B (P-18): sc-160473. Western blot analysis of KIF2B expression in CHO-K1 (**A**), 3T3-L1 (**B**) and B16-F0 (**C**) whole cell lysates.

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.