SANTA CRUZ BIOTECHNOLOGY, INC.

KIF7 (C-17): sc-107667

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The kinesins constitute a large family of microtubule-dependent motor proteins that 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. KIF7 (kinesin family member 7) is a 1,343 amino acid protein expressed in embryonic stem cells, melanotic melanoma and Jurkat T-cells. KIF7 is a member of the KIF27 subfamily of the kinesin-like protein family and contains one kinesin-motor domain. It is suggested that KIF7 may participate in the Hedgehog (Hh) signaling pathway by regulating the proteolysis and stability of GLI transcription factors. Hedgehog (Hh) signaling plays a critical role in embryonic development.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KIF7 (human) mapping to 15q26.1.

RESEARCH USE

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

SOURCE

KIF7 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of KIF7 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-107667 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KIF7 (C-17) is recommended for detection of KIF7 of 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 KIF7 siRNA (h): sc-89962, KIF7 shRNA Plasmid (h): sc-89962-SH and KIF7 shRNA (h) Lentiviral Particles: sc-89962-V.

Molecular Weight of KIF7: 151 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.

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.