

KIF14 (C-18): sc-48560

BACKGROUND

Kinesin is a cytoskeletal motor protein involved in axonal transport and cell division. The kinesin superfamily proteins (KIFs) are microtubule-dependent molecular motors that transport membranous organelles and protein complexes in a microtubule- and ATP-dependent manner. Cells use KIFs to tightly control the direction, destination and speed of transportation of a variety of important functional molecules, including mRNA. KIFs are involved in neuronal function and development. Kinesin family member 14 (KIF14) is an overexpressed potential oncogene in the 1q region of genomic gain in breast cancer cell lines associated with poor prognosis breast cancer. The gain of chromosome 1q likely reflects oncogene amplification. KIF14 is a potential therapeutic target and indicator of oncogenesis.

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CHROMOSOMAL LOCATION

Genetic locus: KIF14 (human) mapping to 1q32.1; Kif14 (mouse) mapping to 1 E4.

SOURCE

KIF14 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KIF14 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-48560 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KIF14 (C-18) is recommended for detection of KIF14 of mouse 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).

KIF14 (C-18) is also recommended for detection of KIF14 in additional species, including canine.

Suitable for use as control antibody for KIF14 siRNA (h): sc-60882, KIF14 siRNA (m): sc-60883, KIF14 shRNA Plasmid (h): sc-60882-SH, KIF14 shRNA Plasmid (m): sc-60883-SH, KIF14 shRNA (h) Lentiviral Particles: sc-60882-V and KIF14 shRNA (m) Lentiviral Particles: sc-60883-V.

Molecular Weight of KIF14: 186 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.

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.



Try **KIF14 (E-3): sc-365553**, our highly recommended monoclonal alternative to KIF14 (C-18).