

Kinectin 1 (H-190): sc-33562

BACKGROUND

The kinesin family of motor proteins comprise at least two forms of conventional kinesin, which are encoded by different genes and designated as ubiquitous kinesin, which is expressed in all cells and tissues, and neuronal kinesin, which is expressed exclusively in neuronal cells. The motor protein kinesin is a heterotetramer composed of two heavy chains and two light chains. While the kinesin heavy chain contains the motor activity, evidence suggests that the kinesin light chain is involved in either modulation of kinesin heavy chain activity or in cargo binding. Kinesin-driven vesicle motility is dependent upon kinectin 1, a kinesin-binding protein. Kinectin 1, also known as kinesin receptor, is an integral membrane protein in the ER. Despite the kinesin-kinectin 1 interaction, a great deal of debate surrounds the involvement of kinectin 1 in microtubule-dependent transport.

CHROMOSOMAL LOCATION

Genetic locus: KTN1 (human) mapping to 14q22.3; Ktn1 (mouse) mapping to 14 C1.

SOURCE

Kinectin 1 (H-190) is a rabbit polyclonal antibody raised against amino acids 1156-1345 mapping near the C-terminus of Kinectin 1 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.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Kinectin 1 (H-190) is recommended for detection of Kinectin 1 isoforms 1 and 2 of mouse, rat and 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Kinectin 1 (H-190) is also recommended for detection of Kinectin 1 isoforms 1 and 2 in additional species, including equine and canine.

Suitable for use as control antibody for Kinectin 1 siRNA (h): sc-43382, Kinectin 1 siRNA (m): sc-43383, Kinectin 1 shRNA Plasmid (h): sc-43382-SH, Kinectin 1 shRNA Plasmid (m): sc-43383-SH, Kinectin 1 shRNA (h) Lentiviral Particles: sc-43382-V and Kinectin 1 shRNA (m) Lentiviral Particles: sc-43383-V.

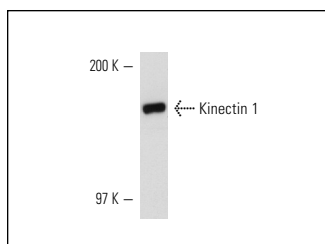
Molecular Weight of Kinectin 1: 160 kDa.

Positive Controls: rat testis extract: sc-2400, KNRK whole cell lysate: sc-2214 or F9 cell lysate: sc-2245.

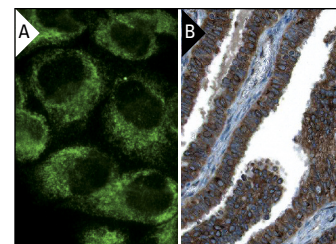
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Kinectin 1 (H-190): sc-33562. Western blot analysis of Kinectin 1 expression in rat testis tissue extract.



Kinectin 1 (H-190): sc-33562. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic staining of glandular cells at high magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

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 **Kinectin 1 (A-12): sc-374577** or **Kinectin 1 (G-5): sc-374576**, our highly recommended monoclonal alternatives to Kinectin 1 (H-190).