

KIF17 (M-20): sc-26850

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. Kinesins also play crucial roles in cell division, intracellular transport and membrane trafficking events including endocytosis and transcytosis. KIF 17 is a neuronal-specific kinesin that transports vesicles containing N-methyl-D-aspartate (NMDA) receptor 2B along microtubules.

REFERENCES

1. Hamm-Alvarez, S.F. 1998. Molecular motors and their role in membrane traffic. *Adv. Drug Deliv. Rev.* 29: 229-242.
2. Cole, D.G. 1999. Kinesin-II, the heteromeric kinesin. *Cell. Mol. Life Sci.* 56: 217-226.
3. Setou, M., et al. 2000. Kinesin superfamily motor protein KIF17 and mLin-10 in NMDA receptor-containing vesicle transport. *Science* 288: 1796-1802.

CHROMOSOMAL LOCATION

Genetic locus: KIF17 (human) mapping to 1p36.12; Kif17 (mouse) mapping to 4 D3.

SOURCE

KIF17 (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of KIF17 of mouse 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-26850 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

KIF17 (M-20) is recommended for detection of KIF17 of mouse, rat and, to a lesser extent, 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).

Suitable for use as control antibody for KIF17 siRNA (h): sc-60024, KIF17 siRNA (m): sc-60025, KIF17 shRNA Plasmid (h): sc-60024-SHKIF17 shRNA Plasmid (m): sc-60025-SH, KIF17 shRNA (h) Lentiviral Particles: sc-60024-V and KIF17 shRNA (m) Lentiviral Particles: sc-60025-V.

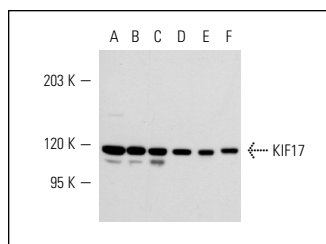
Molecular Weight of KIF17: 120 kDa.

Positive Controls: mouse brain extract: sc-2253 or rat brain extract: sc-2392.

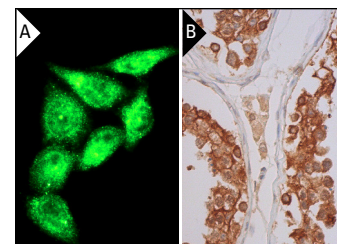
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



KIF17 (M-20): sc-26850. Western blot analysis of KIF17 expression in NTERA-2 cl.D1 (A), SK-N-MC (B), IMR-32 (C) and U-87 MG (D) whole cell lysates and rat brain (E) and mouse brain (F) tissue extracts.



KIF17 (M-20): sc-26850. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic and membrane staining of cells in seminiferous ducts and Leydig cells (B).

SELECT PRODUCT CITATIONS

1. Saade, M., et al. 2007. Dynamic distribution of Spatial during mouse spermatogenesis and its interaction with the kinesin KIF17b. *Exp. Cell Res.* 313: 614-626.
2. Irla, M., et al. 2007. Neuronal distribution of spatial in the developing cerebellum and hippocampus and its somatodendritic association with the kinesin motor KIF17. *Exp. Cell Res.* 313: 4107-4119.
3. Romero, A.M., et al. 2014. Chronic alcohol exposure affects the cell components involved in membrane traffic in neuronal dendrites. *Neurotox. Res.* E-published.

STORAGE

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

MONOS
Satisfaction
Guaranteed

Try **KIF17 (D-8): sc-137040** or **KIF17 (F-4): sc-393423**, our highly recommended monoclonal alternatives to KIF17 (M-20).