

JRK (E-9): sc-398356

BACKGROUND

JRK (jerky protein homolog) is also known as JH8 and is a 520 amino acid ortholog of the mouse Jerky protein. JRK is thought to translocate from the nucleolus to many nuclear foci during the S phase and G₂ phase of the cell cycle. During mitosis, JRK is localized primarily to the cytoplasm, but may also be present as alternatively spliced isoforms that may be found in several other locations within the cell. The gene encoding JRK maps to human chromosome 8q24.3 and shares a locus with genes that are involved in the pathogenesis of childhood absence epilepsy (CAE), suggesting that JRK may be associated with the development of CAE.

REFERENCES

- Morita, R., et al. 1998. JH8, a gene highly homologous to the mouse jerky gene, maps to the region for childhood absence epilepsy on 8q24. *Biochem. Biophys. Res. Commun.* 248: 307-314.
- Morita, R., et al. 1999. Exclusion of the JRK/JH8 gene as a candidate for human childhood absence epilepsy mapped on 8q24. *Epilepsy Res.* 37: 151-158.
- Moore, T., et al. 2001. Polymorphism analysis of JRK/JH8, the human homologue of mouse jerky, and description of a rare mutation in a case of CAE evolving to JME. *Epilepsy Res.* 46: 157-167.
- Liu, W., et al. 2002. Jerky, a protein deficient in a mouse epilepsy model, is associated with translationally inactive mRNA in neurons. *J. Neurosci.* 22: 176-182.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 603210. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Waldron, R. and Moore, T. 2004. Complex regulation and nuclear localization of JRK protein. *Biochem. Soc. Trans.* 32: 920-923.

CHROMOSOMAL LOCATION

Genetic locus: JRK (human) mapping to 8q24.3; Jrk (mouse) mapping to 15 D3.

SOURCE

JRK (E-9) is a mouse monoclonal antibody raised against amino acids 49-187 mapping near the N-terminus of JRK of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

JRK (E-9) is available conjugated to agarose (sc-398356 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398356 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398356 PE), fluorescein (sc-398356 FITC), Alexa Fluor® 488 (sc-398356 AF488), Alexa Fluor® 546 (sc-398356 AF546), Alexa Fluor® 594 (sc-398356 AF594) or Alexa Fluor® 647 (sc-398356 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398356 AF680) or Alexa Fluor® 790 (sc-398356 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

JRK (E-9) is recommended for detection of JRK of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for JRK siRNA (h): sc-77720, JRK siRNA (m): sc-146333, JRK shRNA Plasmid (h): sc-77720-SH, JRK shRNA Plasmid (m): sc-146333-SH, JRK shRNA (h) Lentiviral Particles: sc-77720-V and JRK shRNA (m) Lentiviral Particles: sc-146333-V.

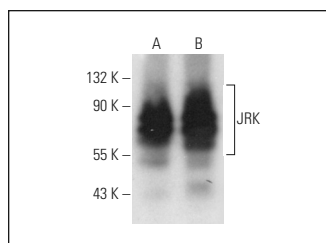
Molecular Weight of JRK: 57 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, HUV-EC-C whole cell lysate: sc-364180 or K-562 nuclear extract: sc-2130.

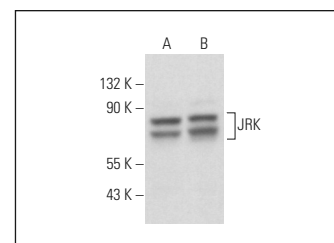
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



JRK (E-9): sc-398356. Western blot analysis of JRK expression in K-562 (A) and HeLa (B) nuclear extracts.



JRK (E-9): sc-398356. Western blot analysis of JRK expression in HeLa nuclear extract (A) and HUV-EC-C whole cell lysate (B).

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 for detailed protocols and support products.