

JRK (N-13): sc-87174

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

1. 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.
2. 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.
3. 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.
4. 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.
5. 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/>

CHROMOSOMAL LOCATION

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

SOURCE

JRK (N-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of JRK of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-87174 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-87174 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

JRK (N-13) is recommended for detection of JRK 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

JRK (N-13) is also recommended for detection of JRK in additional species, including equine, canine and bovine.

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.

JRK (N-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of JRK: 57 kDa.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **JRK (E-9): sc-398356**, our highly recommended monoclonal alternative to JRK (N-13).