SANTA CRUZ BIOTECHNOLOGY, INC.

DnaJC9 (N-13): sc-104906



BACKGROUND

The DnaJ family comprises a group of chaperone proteins that contain a J domain and have diverse cellular localization and functions. DnaJ proteins play a critical role in the HSP 70 chaperone machine by interacting with HSP 70 to stimulate ATP hydrolysis and are also important mediators of proteolysis and protein degradation. DnaJC9 (DnaJ (HSP 40) homolog, subfamily C, member 9), also designated HDJC9, JDD1 or DnaJ protein SB73, is a 260 amino acid protein found at moderate levels in most tissues with highest expression in the germinal zone of the central nervous system, testis, ovary, renal cortex and fetal liver. A member of the DnaJ family, DnaJC9 contains one N-terminal J domain but lacks the typical G/F and zinc finger regions that are typical of DnaJ family members. DnaJC9 localiizes to nuclei under normal conditions but may be transported to cytoplasm and plasma membrane when exposed to heat shock.

REFERENCES

- Kelley, W.L. 1999. Molecular chaperones: How J domains turn on HSP 70s. Curr. Biol. 9: R305-R308.
- Nagase, T., Ishikawa, K., Suyama, M., Kikuno, R., Hirosawa, M., Miyajima, N., Tanaka, A., Kotani, H., Nomura, N. and Ohara, O. 1999. Prediction of the coding sequences of unidentified human genes. XIII. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. DNA Res. 6: 63-70.
- Takamura, Y., Yagi, H., Hase, K., Yoneda, T., Maeda, M., Akagi, Y. and Sato, M. 2001. JDD1, a novel member of the DnaJ family, is expressed in the germinal zone of the rat brain. Biochem. Biophys. Res. Commun. 285: 387-392.
- Qiu, X.B., Shao, Y.M., Miao, S. and Wang, L. 2006. The diversity of the DnaJ/HSP 40 family, the crucial partners for HSP 70 chaperones. Cell. Mol. Life Sci. 63: 2560-2570.
- Han, C., Chen, T., Li, N., Yang, M., Wan, T. and Cao, X. 2007. HDJC9, a novel human type C DnaJ/HSP 40 member interacts with and cochaperones HSP 70 through the J domain. Biochem. Biophys. Res. Commun. 353: 280-285.
- 6. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 611206. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Crawford, N.P., Yang, H., Mattaini, K.R. and Hunter, K.W. 2009. The metastasis efficiency modifier ribosomal RNA processing 1 homolog B (RRP1B) is a chromatin-associated factor. J. Biol. Chem. 284: 28660-28673.

CHROMOSOMAL LOCATION

Genetic locus: DNAJC9 (human) mapping to 10q22.2; Dnajc9 (mouse) mapping to 14 A3.

STORAGE

Store at 4° C, **D0 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.

SOURCE

DnaJC9 (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DnaJC9 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-104906 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DnaJC9 (N-13) is recommended for detection of DnaJC9 of mouse, rat 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).

Suitable for use as control antibody for DnaJC9 siRNA (h): sc-90827, DnaJC9 siRNA (m): sc-143113, DnaJC9 shRNA Plasmid (h): sc-90827-SH, DnaJC9 shRNA Plasmid (m): sc-143113-SH, DnaJC9 shRNA (h) Lentiviral Particles: sc-90827-V and DnaJC9 shRNA (m) Lentiviral Particles: sc-143113-V.

Molecular Weight of DnaJC9: 30 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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (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.