SANTA CRUZ BIOTECHNOLOGY, INC.

DnaJC17 (P-15): sc-104211

BACKGROUND

The DnaJ family is one of the largest of all chaperone families and has evolved with diverse cellular localization and functions. The presence of the J domain defines a protein as a member of the DnaJ family. DnaJ heat shock induced proteins are from the bacterium *Escherichia coli* and are under the control of the htpR regulatory protein. The DnaJ proteins play a critical role in the HSP 70 chaperone machine by interacting with HSP 70 to stimulate ATP hydrolysis. The proteins contain cysteine rich regions that are composed of zinc fingers, forming peptide binding domains responsible for chaperone function. DnaJ proteins are important mediators of proteolysis and are involved in the regulation of protein degradation, exocytosis and endocytosis. DNAJC17 (DnaJ (HSP 40) homolog, subfamily C, member 17) is a 304 amino acid protein containing a J domain and a RRM (RNA recognition motif) domain.

REFERENCES

1. Saito, H. and Uchida, H. 1978. Organization and expression of the dnaJ and dnaK genes of *Escherichia coli* K12. Mol. Gen. Genet. 164: 1-8.
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6. Shi, Y.Y., Hong, X.G. and Wang, C.C. 2005. The C-terminal (331-376) sequence of *Escherichia coli* DnaJ is essential for dimerization and chaperone activity: a small angle X-ray scattering study in solution. J. Biol. Chem. 280: 22761-22768.
7. Robichon, C., Varret, M., Le Liepvre, X., Lasnier, F., Hajduch, E., Ferre, P. and Dugail, I. 2006. DnaJA4 is a SREBP-regulated chaperone involved in the cholesterol biosynthesis pathway. Biochim. Biophys. Acta 1761: 1107-1113.
8. Genevaux, P., Georgopoulos, C. and Kelley, W.L. 2007. The HSP 70 chaperone machines of *Escherichia coli:* a paradigm for the repartition of chaperone functions. Mol. Microbiol. 66: 840-857.
9. Acebrón, S.P., Fernández-Sáiz, V., Taneva, S.G., Moro, F. and Muga, A. 2008. DnaJ recruits DnaK to protein aggregates. J. Biol. Chem. 283: 1381-1390.

CHROMOSOMAL LOCATION

Genetic locus: DNAJC17 (human) mapping to 15q15.1; Dnajc17 (mouse) mapping to 2 E5.

STORAGE

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

SOURCE

DnaJC17 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DnaJC17 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-104211 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DnaJC17 (P-15) is recommended for detection of DnaJC17 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).

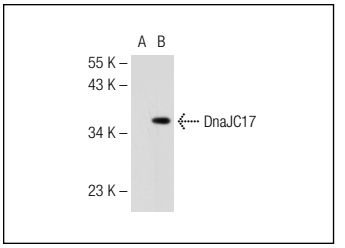
DnaJC17 (P-15) is also recommended for detection of DnaJC17 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for DnaJC17 siRNA (h): sc-90128, DnaJC17 siRNA (m): sc-105308, DnaJC17 shRNA Plasmid (h): sc-90128-SH, DnaJC17 shRNA Plasmid (m): sc-105308-SH, DnaJC17 shRNA (h) Lentiviral Particles: sc-90128-V and DnaJC17 shRNA (m) Lentiviral Particles: sc-105308-V.

Molecular Weight of DnaJC17: 35 kDa.

Positive Controls: DnaJC17 (m): 293T Lysate: sc-126737.

DATA



DnaJC17 (P-15): sc-104211. Western blot analysis of DnaJC17 expression in non-transfected: sc-117752 (**A**) and mouse DnaJC17 transfected: sc-126737 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Laterza, O.F., Modur, V.R., Crimmins, D.L., Olander, J.V., Landt, Y., Lee, J.M. and Ladenson, J.H. 2006. Identification of novel brain biomarkers. Clin. Chem. 52: 1713-1721.

RESEARCH USE

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