

DnaJB6 (E-17): sc-104204

BACKGROUND

The DnaJ family is one of the largest of all the 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 that form a peptide binding domain responsible for the chaperone function. DnaJ proteins are important mediators of proteolysis and are involved in the regulation of protein degradation, exocytosis and endocytosis. DnaJB6 (DnaJ homolog subfamily B member 6), also known as MRJ, HSJ2, HHDJ1, or MSJ-1, is highly expressed in brain and much weaker in all other tissues.

REFERENCES

- Saito, H., et al. 1978. Organization and expression of the DnaJ and DnaK genes of *Escherichia coli* K12. *Mol. Gen. Genet.* 164: 1-8.
- Georgopoulos, C.P., et al. 1980. Identification of the *E. coli* DnaJ gene product. *Mol. Gen. Genet.* 178: 583-588.
- Suh, W.C., et al. 1998. Interaction of the HSP 70 molecular chaperone, DnaK, with its cochaperone DnaJ. *Proc. Natl. Acad. Sci. USA* 95: 15223-15228.
- Tomoyasu, T., et al. 1998. Levels of DnaK and DnaJ provide tight control of heat shock gene expression and protein repair in *Escherichia coli*. *Mol. Microbiol.* 30: 567-581.
- Stewart, G.R., et al. 2004. Analysis of the function of mycobacterial DnaJ proteins by overexpression and microarray profiling. *Tuberculosis* 84: 180-187.

CHROMOSOMAL LOCATION

Genetic locus: DNAJB6 (human) mapping to 7q36.3; Dnajb6 (mouse) mapping to 5 B1.

SOURCE

DnaJB6 (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DnaJB6 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-104204 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.

APPLICATIONS

DnaJB6 (E-17) is recommended for detection of DnaJB6 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); non cross-reactive with other DnaJ family members.

DnaJB6 (E-17) is also recommended for detection of DnaJB6 in additional species, including porcine.

Suitable for use as control antibody for DnaJB6 siRNA (h): sc-89742, DnaJB6 siRNA (m): sc-143095, DnaJB6 shRNA Plasmid (h): sc-89742-SH, DnaJB6 shRNA Plasmid (m): sc-143095-SH, DnaJB6 shRNA (h) Lentiviral Particles: sc-89742-V and DnaJB6 shRNA (m) Lentiviral Particles: sc-143095-V.

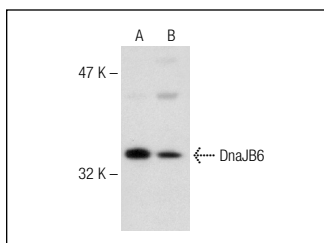
Molecular Weight of DnaJB6: 36 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or MOLT-4 cell lysate: sc-2233.

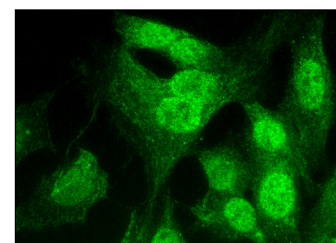
RECOMMENDED SECONDARY REAGENTS

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.

DATA



DnaJB6 (E-17): sc-104204. Western blot analysis of DnaJB6 expression in Jurkat (A) and MOLT-4 (B) whole cell lysates.



DnaJB6 (E-17): sc-104204. Immunofluorescence staining of formalin-fixed HepG2 cells showing nuclear and cytoplasmic localization.

RESEARCH USE

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



Try **DnaJB6 (B-5): sc-365574** or **DnaJB6 (F-8): sc-365573**, our highly recommended monoclonal alternatives to DnaJB6 (E-17).