

DnaJC21 (D-13): sc-104891

BACKGROUND

With the presence of the J domain defining a protein as a member, the DnaJ family has evolved with diverse cellular localization and functions and is one of the largest chaperone families. DnaJ heat-shock-induced proteins are derived from the bacterium *Escherichia coli* and are controlled by the htpR regulatory protein. DnaJ proteins play a critical role in the HSP 70 chaperone machine by interacting with HSP 70 to stimulate ATP hydrolysis. Members of this family contain cysteine-rich regions composed of zinc fingers that form a peptide-binding domain responsible for chaperone function. DnaJ proteins are important mediators of proteolysis and are involved in the regulation of protein degradation, exocytosis and endocytosis. DNAJC21 (DnaJ homolog sub-family C member 21), also known as DNAJA5 or JJJ1, is a 531 amino acid protein that contains 2 C₂H₂-type zinc fingers and one J domain. Expressed in placenta, pancreas, kidney and brain, DNAJC21 may be a co-chaperone for HSP 70.

REFERENCES

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3. Suh, W.C., et al. 1998. Interaction of the Hsp70 molecular chaperone, DnaK, with its cochaperone DnaJ. *Proc. Natl. Acad. Sci. USA* 95: 15223-15228.
4. 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.
5. Chen, J., et al. 2004. Cloning and characterization of a novel human cDNA encoding a J-domain protein (DNAJA5) from the fetal brain. *Int. J. Mol. Med.* 13: 735-740.
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CHROMOSOMAL LOCATION

Genetic locus: DNAJC21 (human) mapping to 5p13.2.

SOURCE

DnaJC21 (D-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DnaJC21 of human origin.

STORAGE

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

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-104891 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DnaJC21 (D-13) is recommended for detection of DnaJC21 of 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).

Suitable for use as control antibody for DnaJC21 siRNA (h): sc-91663, DnaJC21 shRNA Plasmid (h): sc-91663-SH and DnaJC21 shRNA (h) Lentiviral Particles: sc-91663-V.

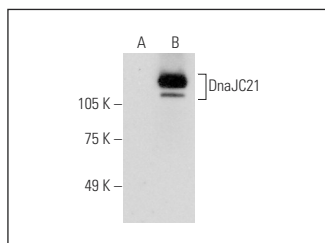
Molecular Weight of DnaJC21 isoforms 1/2/3: 62/67/64 kDa.

Positive Controls: DnaJC21 (h): 293T Lysate: sc-128479.

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



DnaJC21 (D-13): sc-104891. Western blot analysis of DnaJC21 expression in non-transfected: sc-117752 (A) and human DnaJC21 transfected: sc-128479 (B) 293T whole cell lysates.

RESEARCH USE

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