

pan DnaJ (K-16): sc-109472

BACKGROUND

The DnaJ family is one of the largest of all the chaperone families and has evolved with diverse cellular localization and functions. Members of the DnaJ family are characterized by the presence of the J domain. 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. Proteins of the DnaJ family contain cysteine rich regions that are 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.

REFERENCES

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- 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.
- 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.
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- Robichon, C., et al. 2006. DnaJA4 is a SREBP-regulated chaperone involved in the cholesterol biosynthesis pathway. Biochim. Biophys. Acta 1761: 1107-1113.

SOURCE

pan DnaJ (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DnaJA5 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-109472 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

pan DnaJ (K-16) is recommended for detection of HSP 40-4, DnaJA4, HCG3, DnaJB4, DnaJB5, DnaJB6, DnaJB7, DnaJB8, DnaJB12, DnaJB14, CSP, DnaJC5γ, DnaJC5B, DnaJC18, DnaJA2, DnaJB2, HCG3, ERdj3, TSARG6, DnaJC3 and DnaJC16 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); may cross-react with DnaJB1, DnaJB9, DnaJC1, DnaJC10 and Sacsin.

pan DnaJ (K-16) is also recommended for detection of HSP 40-4, DnaJA4, HCG3, DnaJB4, DnaJB5, DnaJB6, DnaJB7, DnaJB8, DnaJB12, DnaJB14, CSP, DnaJC5γ, DnaJC5B, DnaJC18, DnaJA2, DnaJB2, HCG3, ERdj3, TSARG6, DnaJC3 and DnaJC16 in additional species, including equine, canine, bovine, porcine and avian.

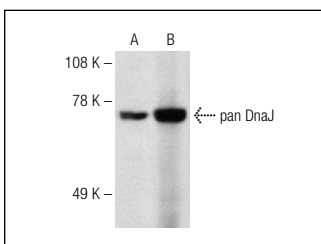
Molecular Weight of pan DnaJ family members: 16-90 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or mouse brain extract: sc-2253.

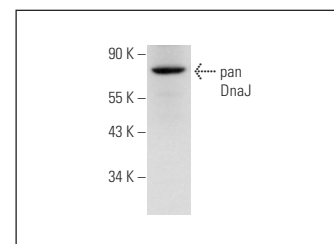
RECOMMENDED SECONDARY REAGENTS

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



pan DnaJ (K-16): sc-109472. Western blot analysis of pan DnaJ expression in HeLa whole cell lysate (A) and mouse brain tissue extract (B).



pan DnaJ (K-16): sc-109472. Western blot analysis of pan DnaJ expression in Jurkat whole cell lysate.

RESEARCH USE

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

PROTOCOLS

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