## SANTA CRUZ BIOTECHNOLOGY, INC.

# DnaJB14 (K-13): sc-104203



## BACKGROUND

The DnaJ family, one of the largest of all the chaperone families, has evolved with diverse cellular localization and functions. The presence of a J domain defines a protein as a member of the DnaJ family. DnaJ heat-shock induced proteins are derived from the bacterium *Escherichia coli* and are under the control of 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 that are composed of zinc fingers that form a peptide-binding domain responsible for chaperone function. DnaJ family members are important mediators of proteolysis and are involved in the regulation of protein degradation, exocytosis and endocytosis. DnaJB14 (DnaJ (Hsp40) homolog, subfamily B, member 14) is a 379 amino acid single-pass membrane protein containing one J domain and is thought to act as a co-chaperone. DnaJB14 exists as two alternatively spliced isoforms.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: DNAJB14 (human) mapping to 4q23; Dnajb14 (mouse) mapping to 3 G3.

#### **RESEARCH USE**

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

## SOURCE

DnaJB14 (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DnaJB14 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-104203 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

DnaJB14 (K-13) is recommended for detection of DnaJB14 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); non cross-reactive with other DNAJ family members.

Suitable for use as control antibody for DnaJB14 siRNA (h): sc-88854, DnaJB14 siRNA (m): sc-143091, DnaJB14 shRNA Plasmid (h): sc-88854-SH, DnaJB14 shRNA Plasmid (m): sc-143091-SH, DnaJB14 shRNA (h) Lentiviral Particles: sc-88854-V and DnaJB14 shRNA (m) Lentiviral Particles: sc-143091-V.

Molecular Weight of DnaJB14: 43 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.

#### **STORAGE**

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

#### PROTOCOLS

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

MONOS Satisfation Guaranteed

Try **DnaJB14 (D-6): sc-515383**, our highly recommended monoclonal alternative to DnaJB14 (K-13).