# DnaJB4 (L-14): sc-103474



The Power to Question

#### **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. DnaJB4 (DnaJ homolog subfamily B member 4), also known as HLJ1, is expressed in skeletal muscle, heart and pancreas, and lower expression in brain, placenta and liver.

#### **REFERENCES**

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## CHROMOSOMAL LOCATION

Genetic locus: DNAJB4 (human) mapping to 1p31.1; Dnajb4 (mouse) mapping to 3 H3.

# SOURCE

DnaJB4 (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DnaJB4 of human origin.

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-103474 P, ( $100 \mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

DnaJB4 (L-14) is recommended for detection of DnaJB4 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 DnaJB familly members.

Suitable for use as control antibody for DnaJB4 siRNA (h): sc-88157, DnaJB4 siRNA (m): sc-105306, DnaJB4 shRNA Plasmid (h): sc-88157-SH, DnaJB4 shRNA Plasmid (m): sc-105306-SH, DnaJB4 shRNA (h) Lentiviral Particles: sc-88157-V and DnaJB4 shRNA (m) Lentiviral Particles: sc-105306-V.

Molecular Weight of DnaJB4: 38 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

#### **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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (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.

### **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.



Try **DnaJB4 (R-07): sc-100711**, our highly recommended monoclonal alternative to DnaJB4 (L-14).