

# DnaJC14 (V-16): sc-132278

## 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. DnaJ proteins are important mediators of proteolysis and are involved in the regulation of protein degradation, exocytosis and endocytosis. DnaJC14 (DnaJ homolog subfamily C member 14), also known as DRIP78 (dopamine receptor-interacting protein of 78 kDa) and HDJ3 (human DnaJ protein 3), is a 702 amino acid endoplasmic reticular membrane protein that contains one J domain. DnaJC14 regulates the export of target proteins, such as the dopamine D1 receptor (D1DR), from the endoplasmic reticulum to the cell surface.

## REFERENCES

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2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606092. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Chen, J., Huang, Y., Wu, H., Ni, X., Cheng, H., Fan, J., Gu, S., Gu, X., Cao, G., Ying, K., Mao, Y., Lu, Y. and Xie, Y. 2003. Molecular cloning and characterization of a novel human J-domain protein gene (HDJ3) from the fetal brain. *J. Hum. Genet.* 48: 217-221.
4. Wittwer, C., Chowdhary, B.P. and Distl, O. 2005. Radiation hybrid mapping of equine CDK2, DGKA, DNAJC14, MMP19, CTSL and GAS1. *Anim. Genet.* 36: 536-537.
5. Tzankov, S., Wong, M.J., Shi, K., Nassif, C. and Young, J.C. 2008. Functional divergence between co-chaperones of HSC 70. *J. Biol. Chem.* 283: 27100-27109.

## CHROMOSOMAL LOCATION

Genetic locus: DNAJC14 (human) mapping to 12q13.2; Dnajc14 (mouse) mapping to 10 D3.

## SOURCE

DnaJC14 (V-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DnaJC14 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-132278 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

DnaJC14 (V-16) is recommended for detection of DnaJC14 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 DnaJC family members.

DnaJC14 (V-16) is also recommended for detection of DnaJC14 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for DnaJC14 siRNA (h): sc-95741, DnaJC14 siRNA (m): sc-143101, DnaJC14 shRNA Plasmid (h): sc-95741-SH, DnaJC14 shRNA Plasmid (m): sc-143101-SH, DnaJC14 shRNA (h) Lentiviral Particles: sc-95741-V and DnaJC14 shRNA (m) Lentiviral Particles: sc-143101-V.

Molecular Weight of DnaJC14: 79 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) 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.