

# DnaJC28 (S-20): sc-83545

## BACKGROUND

The smallest of the human chromosomes, 21 makes up about 1.5% of the human genome. Chromosome 21 contains nearly 300 genes and 47 million base pairs. Down syndrome, also known as Trisomy 21, is the disease most commonly associated with chromosome 21. Alzheimer's disease, Jervell and Lange-Nielsen syndrome and amyotrophic lateral sclerosis are also associated with chromosome 21. Translocations are found to occur between chromosome 21 and 8, and chromosome 21 and 12, in certain leukemias. DnaJC28 (DnaJ homolog subfamily C member 28), also known as C21orf55, C21orf78 or MGC27620 is a 388 amino acid protein that is expressed in the fetal and adult brain, testis, uterus, spleen and liver. It has been suggested that DnaJC28 may play a role in protein folding or as a chaperone. The DnaJC28 gene product has been provisionally designated DnaJC28 pending further characterization.

## REFERENCES

1. Tesson, F., et al. 1996. Exclusion of KCNE1 (IsK) as a candidate gene for Jervell and Lange-Nielsen syndrome. *J. Mol. Cell. Cardiol.* 28: 2051-2055.
2. Tyson, J., et al. 1997. IsK and KvLQT1: mutation in either of the two subunits of the slow component of the delayed rectifier potassium channel can cause Jervell and Lange-Nielsen syndrome. *Hum. Mol. Genet.* 6: 2179-2185.
3. Müller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. *Proc. Natl. Acad. Sci. USA* 97: 206-211.
4. Mao, R., et al. 2005. Primary and secondary transcriptional effects in the developing human Down syndrome brain and heart. *Genome Biol.* 6: R107.
5. Robakis, N.K. 2006. The discovery and mapping to chromosome 21 of the Alzheimer's amyloid gene: history revised. *J. Alzheimers Dis.* 10: 453-455.

## CHROMOSOMAL LOCATION

Genetic locus: DNAJC28 (human) mapping to 21q22.11; Dnajc28 (mouse) mapping to 16 C3.3.

## SOURCEZ

DnaJC28 (S-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of DnaJC28 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83545 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

DnaJC28 (S-20) is recommended for detection of DnaJC28 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).

DnaJC28 (S-20) is also recommended for detection of DnaJC28 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for DnaJC28 siRNA (h): sc-91414, DnaJC28 siRNA (m): sc-143107, DnaJC28 shRNA Plasmid (h): sc-91414-SH, DnaJC28 shRNA Plasmid (m): sc-143107-SH, DnaJC28 shRNA (h) Lentiviral Particles: sc-91414-V and DnaJC28 shRNA (m) Lentiviral Particles: sc-143107-V.

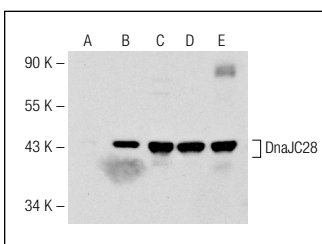
Molecular Weight of DnaJC28: 46 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, MES-SA/Dx5 cell lysate: sc-2284 or DnaJC28 (h): 293T Lysate: sc-175769.

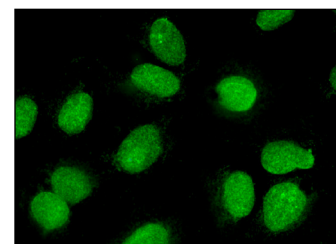
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



DnaJC28 (S-20): sc-83545. Western blot analysis of DnaJC28 expression in non-transfected 293T: sc-117752 (A), human DnaJC28 transfected 293T: sc-175769 (B), MES-SA/Dx5 (C) and Hep G2 (D) whole cell lysates and mouse brain tissue extract (E).



DnaJC28 (S-20): sc-83545. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization.

## RESEARCH USE

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