SANTA CRUZ BIOTECHNOLOGY, INC.

CGI-69 (F-12): sc-132229



BACKGROUND

CGI-69, also known as SLC25A39 (solute carrier family 25, member 39) is a multi-pass membrane protein that is expressed in a variety of tissues with predominant expression in kidney and testis. Belonging to the mitochondrial carrier family (a family whose members participate in the transport of molecules across the mitochondrial membrane), CGI-69 localizes to the inner mitochondrial membrane and contains three solcar repeats. Human CGI-69 shares 86% identity and 98% similarity with its mouse counterpart. Due to alternative splicing events, CGI-69 exists in two isoforms, the longer of which is also known as CGI-69L. As is suggested by its strong expression in testis, CGI-69 may play an important role in mitochondrial function in this tissue.

REFERENCES

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- 2. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 610820. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 3. Luk, E., Carroll, M., Baker, M. and Culotta, V.C. 2003. Manganese activation of superoxide dismutase 2 in Saccharomyces cerevisiae requires MTM1, a member of the mitochondrial carrier family. Proc. Natl. Acad. Sci. USA 100: 10353-10357.
- 4. Haitina, T., Lindblom, J., Renström, T. and Fredriksson, R. 2006. Fourteen novel human members of mitochondrial solute carrier family 25 (SLC25) widely expressed in the central nervous system. Genomics 88: 779-790.
- 5. Gijselinck, I., van der Zee, J., Engelborghs, S., Goossens, D., Peeters, K., Mattheijssens, M., Corsmit, E., Del-Favero, J., De Deyn, P.P., Van Broeckhoven, C. and Cruts, M. 2008. Progranulin locus deletion in frontotemporal dementia. Hum. Mutat. 29: 53-58.

CHROMOSOMAL LOCATION

Genetic locus: SLC25A39 (human) mapping to 17q21.31; Slc25a39 (mouse) mapping to 11 D.

SOURCE

CGI-69 (F-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CGI-69 of human origin.

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132229 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

CGI-69 (F-12) is recommended for detection of CGI-69 isoforms 1 and 2 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 CGI family members.

CGI-69 (F-12) is also recommended for detection of CGI-69 isoforms 1 and 2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for CGI-69 siRNA (h): sc-94026, CGI-69 siRNA (m): sc-142306, CGI-69 shRNA Plasmid (h): sc-94026-SH, CGI-69 shRNA Plasmid (m): sc-142306-SH, CGI-69 shRNA (h) Lentiviral Particles: sc-94026-V and CGI-69 shRNA (m) Lentiviral Particles: sc-142306-V.

Molecular Weight of CGI-69: 39 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) 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.

PROTOCOLS

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