# SANTA CRUZ BIOTECHNOLOGY, INC.

# Get4 (Q-12): sc-162611



# BACKGROUND

Get4 (Golgi to ER traffic protein 4 homolog), also known as CEE (conserved edge-expressed protein), TRC35 (transmembrane domain recognition complex 35 kDa subunit) or CGI-20, is a 327 amino acid cytoplasmic protein that exists as 2 alternatively spliced isoforms. Get4 forms a multiprotein complex, known as the BAT3 complex, with UBL4A, BAT3 and ARSA. The BAT3 complex plays a role in transporting tail-anchored membrane proteins to the endoplasmic reticulum membrane. The gene encoding Get4 maps to human chromosome 7p22.3. Human chromosome 7 houses over 1,000 genes, comprises nearly 5% of the human genome and has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

## REFERENCES

- Tsipouras, P., Myers, J.C., Ramirez, F. and Prockop, D.J. 1983. Restriction fragment length polymorphism associated with the proα2(I) gene of human type I procollagen. Application to a family with an autosomal dominant form of osteogenesis imperfecta. J. Clin. Invest. 72: 1262-1267.
- Lai, C.H., Chou, C.Y., Ch'ang, L.Y., Liu, C.S. and Lin, W. 2000. Identification of novel human genes evolutionarily conserved in Caenorhabditis elegans by comparative proteomics. Genome Res. 10: 703-713.
- Iwasaki, S., Usami, S., Abe, S., Isoda, H., Watanabe, T. and Hoshino, T. 2001. Long-term audiological feature in Pendred syndrome caused by PDS mutation. Arch. Otolaryngol. Head Neck Surg. 127: 705-708.
- Reiner, O., Sapoznik, S. and Sapir, T. 2006. Lissencephaly 1 linking to multiple diseases: mental retardation, neurodegeneration, schizophrenia, male sterility, and more. Neuromolecular Med. 8: 547-565.
- Fernandes, J.M., Macqueen, D.J., Lee, H.T. and Johnston, I.A. 2008. Genomic, evolutionary, and expression analyses of cee, an ancient gene involved in normal growth and development. Genomics 91: 315-325.
- Chang, Y.W., Chuang, Y.C., Ho, Y.C., Cheng, M.Y., Sun, Y.J., Hsiao, C.D. and Wang, C. 2010. Crystal structure of Get4-Get5 complex and its interactions with Sgt2, Get3, and Ydj1. J. Biol. Chem. 285: 9962-9970.
- 7. Mariappan, M., Li, X., Stefanovic, S., Sharma, A., Mateja, A., Keenan, R.J. and Hegde, R.S. 2010. A ribosome-associating factor chaperones tail-anchored membrane proteins. Nature 466: 1120-1124.
- 8. Online Mendelian Inheritance in Man, OMIM™. 2010. Johns Hopkins University, Baltimore, MD. MIM Number: 612056. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

## CHROMOSOMAL LOCATION

Genetic locus: GET4 (human) mapping to 7p22.3; Get4 (mouse) mapping to 5 G2.

## SOURCE

Get4 (Q-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Get4 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-162611 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

Get4 (Q-12) is recommended for detection of Get4 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).

Get4 (Q-12) is also recommended for detection of Get4 in additional species, including porcine.

Suitable for use as control antibody for Get4 siRNA (h): sc-89392, Get4 siRNA (m): sc-108148, Get4 shRNA Plasmid (h): sc-89392-SH, Get4 shRNA Plasmid (m): sc-108148-SH, Get4 shRNA (h) Lentiviral Particles: sc-89392-V and Get4 shRNA (m) Lentiviral Particles: sc-108148-V.

Molecular Weight of Get4 isoform 1/2: 37/31 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-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 or our catalog for detailed protocols and support products.