SANTA CRUZ BIOTECHNOLOGY, INC.

Glutamine-rich 1 (C-13): sc-99906

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Glutamine-rich 1 is a 776 amino acid protein containing one CARD domain, which is normally found in proteins that are related to inflammation and apoptosis processes. CARD domains are found in a wide variety of proteins including kinases, caspases, and helicases. The gene encoding Glutamine-rich 1 maps to human chromosome 3. Chromosome 3 is made up of about 214 million bases encoding over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

1. Müller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. Proc. Natl. Acad. Sci. USA 97: 206-211.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 610412. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
3. Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. Mol. Biol. 37: 194-211.
4. Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. Genomics 83: 193-202.
5. Yue, Y., et al. 2005. Comparative cytogenetics of human chromosome 3q21.3 reveals a hot spot for ectopic recombination in hominoid evolution. Genomics 85: 36-47.
6. Darai, E., et al. 2005. Evolutionarily plastic regions at human 3p21.3 coincide with tumor breakpoints identified by the "elimination test." Genomics 86: 1-12.
7. Yue, Y., et al. 2005. Genomic structure and paralogous regions of the inversion breakpoint occurring between human chromosome 3p12.3 and orangutan chromosome 2. Cytogenet. Genome Res. 108: 98-105.
8. Muzny, D.M., et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. Nature 440: 1194-1198.
9. Hruz, P., et al. 2008. Caspase recruitment domain-containing sensors and adaptors in intestinal innate immunity. Curr. Opin. Gastroenterol. 24: 108-114.

CHROMOSOMAL LOCATION

Genetic locus: QRICH1 (human) mapping to 3p21.31; Qrich1 (mouse) mapping to 9 F2.

SOURCE

Glutamine-rich 1 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Glutamine-rich 1 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-99906 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Glutamine-rich 1 (C-13) is recommended for detection of Glutamine-rich 1 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 family member Glutamine-rich 2.

Glutamine-rich 1 (C-13) is also recommended for detection of Glutamine-rich 1 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Glutamine-rich 1 siRNA (h): sc-78280, Glutamine-rich 1 siRNA (m): sc-145452, Glutamine-rich 1 shRNA Plasmid (h): sc-78280-SH, Glutamine-rich 1 shRNA Plasmid (m): sc-145452-SH, Glutamine-rich 1 shRNA (h) Lentiviral Particles: sc-78280-V and Glutamine-rich 1 shRNA (m) Lentiviral Particles: sc-145452-V.

Molecular Weight of Glutamine-rich 1: 86 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 or our catalog for detailed protocols and support products.