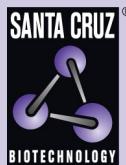


C7orf73 (Q-20): sc-248259



The Power to Question

BACKGROUND

PL-5283 is a 47 amino acid protein encoded by a gene that maps to human chromosome 7q33. Chromosome 7 is approximately 158 million bases long, encodes over 1,000 genes and makes up approximately 5% of the human genome. Chromosome 7 is linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. Deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, unusual friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also linked to myeloid disorders, including acute myelogenous leukemia and myelodysplasia.

REFERENCES

- Tsipouras, P., Myers, J.C., Ramirez, F. and Prockop, D.J. 1983. Restriction fragment length polymorphism associated with the pro α 2(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.
- Liang, H., Fairman, J., Claxton, D.F., Nowell, P.C., Green, E.D. and Nagarajan, L. 1998. Molecular anatomy of chromosome 7q deletions in myeloid neoplasms: evidence for multiple critical loci. *Proc. Natl. Acad. Sci. USA* 95: 3781-3785.
- Hillier, L.W., Fulton, R.S., Fulton, L.A., Graves, T.A., Pepin, K.H., Wagner-McPherson, C., Layman, D., Maas, J., Jaeger, S., Walker, R., Wylie, K., Sekhon, M., Becker, M.C., O'Laughlin, M.D., Schaller, M.E., et al. 2003. The DNA sequence of human chromosome 7. *Nature* 424: 157-164.
- Eckert, M.A., Galaburda, A.M., Mills, D.L., Bellugi, U., Korenberg, J.R. and Reiss, A.L. 2006. The neurobiology of Williams syndrome: cascading influences of visual system impairment? *Cell. Mol. Life Sci.* 63: 1867-1875.
- Osborne, L.R., Joseph-George, A.M. and Scherer, S.W. 2006. Williams-Beuren syndrome diagnosis using fluorescence *in situ* hybridization. *Methods Mol. Med.* 126: 113-128.
- Brezinová, J., Zemanová, Z., Ransdorfová, S., Pavlistová, L., Babická, L., Housková, L., Melichercíková, J., Sisková, M., Cermák, J. and Michalová, K. 2007. Structural aberrations of chromosome 7 revealed by a combination of molecular cytogenetic techniques in myeloid malignancies. *Cancer Genet. Cytogenet.* 173: 10-16.
- Leone, G., Pagano, L., Ben-Yehuda, D. and Voso, M.T. 2007. Therapy-related leukemia and myelodysplasia: susceptibility and incidence. *Haematologica* 92: 1389-1398.

CHROMOSOMAL LOCATION

Genetic locus: C7orf73 (human) mapping to 7q33.

SOURCE

C7orf73 (Q-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C7orf73 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-248259 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

C7orf73 (Q-20) is recommended for detection of C7orf73 of 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).

C7orf73 (Q-20) is also recommended for detection of C7orf73 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PL-5283 siRNA (h): sc-89562, PL-5283 shRNA Plasmid (h): sc-89562-SH and PL-5283 shRNA (h) Lentiviral Particles: sc-89562-V.

Molecular Weight of C7orf73: 5 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.

PROTOCOLS

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