SANTA CRUZ BIOTECHNOLOGY, INC.

LOC641765 (V-21): sc-133751

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Chromosome 7 is about 158 milllion bases long, encodes over 1000 genes and makes up about 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also seen in a number of myeloid disorders including cases of acute myelogenous leukemia and myelodysplasia. The LOC641765 gene product has been provisionally designated LOC641765 pending further characterization.

REFERENCES

1. Tsipouras, P., et al. 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.
2. Liang, H., et al. 1998. Molecular anatomy of chromosome 7q deletions in myeloid neoplasms: evidence for multiple critical loci. Proc. Natl. Acad. Sci. USA 95: 3781-3785.
3. Hillier, L.W., et al. 2003. The DNA sequence of human chromosome 7. Nature 424: 157-164.
4. Eckert, M.A., et al. 2006. The neurobiology of Williams syndrome: cascading influences of visual system impairment? Cell. Mol. Life Sci. 63: 1867-1875.
5. Osborne, L.R., et al. 2006. Williams-Beuren syndrome diagnosis using fluorescence *in situ* hybridization. Methods Mol. Med. 126: 113-128.
6. Reiner, O., et al. 2006. Lissencephaly 1 linking to multiple diseases: mental retardation, neurodegeneration, schizophrenia, male sterility and more. Neuromolecular Med. 8: 547-565.
7. Shimamura, A. 2006. Shwachman-Diamond syndrome. Semin. Hematol. 43: 178-188.
8. Brezinová, J., et al. 2007. Structural aberrations of chromosome 7 revealed by a combination of molecular cytogenetic techniques in myeloid malignancies. Cancer Genet. Cytogenet. 173: 10-16.
9. Leone, G., et al. 2007. Therapy-related leukemia and myelodysplasia: susceptibility and incidence. Haematologica 92: 1389-1398.

CHROMOSOMAL LOCATION

Genetic locus: LOC641765 (human) mapping to 7q11.21.

SOURCE

LOC641765 (V-21) is an affinity purified rabbit polyclonal antibody raised against synthetic LOC641765 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

LOC641765 (V-21) is recommended for detection of LOC641765 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

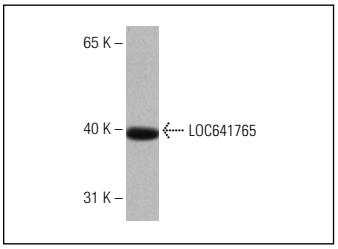
Molecular Weight of LOC641765: 40 kDa.

Positive Controls: Human fetal liver tissue extract.

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).

DATA



LOC641765 (V-21): sc-133751. Western blot analysis of LOC641765 expression in human fetal liver tissue extract.

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.