

C7orf64 (H-140): sc-135131

BACKGROUND

Chromosome 7 is about 158 million bases long, encodes over 1,000 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 C7orf64 gene product has been provisionally designated C7orf64 pending further characterization.

REFERENCES

1. Tsiouras, 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. Shimamura, A. 2006. Shwachman-Diamond syndrome. *Semin. Hematol.* 43: 178-188.

CHROMOSOMAL LOCATION

Genetic locus: RBM48 (human) mapping to 7q21.2; C030048B08Rik (mouse) mapping to 5 A1.

SOURCE

C7orf64 (H-140) is a rabbit polyclonal antibody raised against amino acids 1-140 mapping at the N-terminus of C7orf64 of human origin.

PRODUCT

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

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.

APPLICATIONS

C7orf64 (H-140) is recommended for detection of C7orf64 of human origin and C030048B08Rik of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

C7orf64 (H-140) is also recommended for detection of C7orf64 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for C7orf64 siRNA (h): sc-89535, C030048B08Rik siRNA (m): sc-141813, C7orf64 shRNA Plasmid (h): sc-89535-SH, C030048B08Rik shRNA Plasmid (m): sc-141813-SH, C7orf64 shRNA (h) Lentiviral Particles: sc-89535-V and C030048B08Rik shRNA (m) Lentiviral Particles: sc-141813-V.

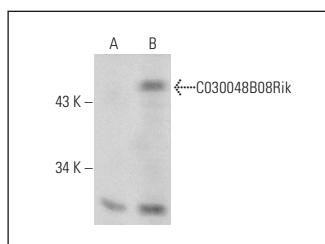
Molecular Weight of C7orf64: 42 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206 or C030048B08Rik (m): 293T Lysate: sc-118898.

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



C7orf64 (H-140): sc-135131. Western blot analysis of C030048B08Rik expression in non-transfected: sc-117752 (A) and mouse C030048B08Rik transfected: sc-118898 (B) 293T whole cell lysates.

RESEARCH USE

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