SANTA CRUZ BIOTECHNOLOGY, INC.

Zimp7 (N-14): sc-163546

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The Power to Question

BACKGROUND

Zimp7 (zinc finger MIZ domain-containing protein 2), also known as PIAS-like protein Zimp7, is a 920 amino acid protein that localizes to the nucleus and is expressed most abundantly in testis and in lower levels in the heart, brain, pancreas, prostrate and ovary. Zimp7 is thought to increase ligand-dependent transcriptional activity of AR and other nuclear hormone receptors and contains one SP-RING-type zinc finger. There are three alternatively spliced isoforms of Zimp7. The gene encoding Zimp7 maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 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.

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. Iwasaki, S., et al. 2001. Long-term audiological feature in Pendred syndrome caused by PDS mutation. Arch. Otolaryngol. Head Neck Surg. 127: 705-708.
4. Huang, C.Y., et al. 2005. hZimp7, a novel PIAS-like protein, enhances androgen receptor-mediated transcription and interacts with SWI/SNF-like BAF complexes. Mol. Endocrinol. 19: 2915-2929.
5. Osborne, L.R., et al. 2006. Williams-Beuren syndrome diagnosis using fluorescence *in situ* hybridization. Methods Mol. Med. 126: 113-128.

CHROMOSOMAL LOCATION

Genetic locus: ZMIZ2 (human) mapping to 7p13; Zmiz2 (mouse) mapping to 11 A1.

SOURCE

Zimp7 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Zimp7 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-163546 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Zimp7 (N-14) is recommended for detection of Zimp7 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 Zimp10.

Zimp7 (N-14) is also recommended for detection of Zimp7 in additional species, including porcine.

Suitable for use as control antibody for Zimp7 siRNA (h): sc-89373, Zimp7 siRNA (m): sc-155616, Zimp7 shRNA Plasmid (h): sc-89373-SH, Zimp7 shRNA Plasmid (m): sc-155616-SH, Zimp7 shRNA (h) Lentiviral Particles: sc-89373-V and Zimp7 shRNA (m) Lentiviral Particles: sc-155616-V.

Molecular Weight of Zimp7: 97/94/91 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.