SANTA CRUZ BIOTECHNOLOGY, INC.

SOBP (P-14): sc-169386

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

SOBP (sine oculis-binding protein homolog), also known as JXC1 (jackson circler protein 1), is an 873 amino acid protein that contains 2 FCS-type zinc fingers, belongs to the SOBP family and is implicated in development of the cochlea. The gene that encodes SOBP consists of approximately 171,352 bases and maps to human chromosome 6q21. Defects in SOBP are the cause of mental retardation-anterior maxillary protrusion-strabismus (MRAMS), a syndrome characterized by severe mental retardation, strabismus and dysmorphic features such as anterior maxillary protrusion with vertical maxillary excess, open bite and prominent crowded teeth. Some patients may lack dysmorphic features and manifest temporal lobe epilepsy and psychosis. Esotropia and amblyopia are also present in some individuals with MRAMS.

REFERENCES

1. Brunner, H.G., et al. 1994. A Stickler syndrome gene is linked to chromosome 6 near the COL11A2 gene. Hum. Mol. Genet. 3: 1561-1564.
2. Cesari, R., et al. 2003. Parkin, a gene implicated in autosomal recessive juvenile parkinsonism, is a candidate tumor suppressor gene on chromosome 6q25-q27. Proc. Natl. Acad. Sci. USA 100: 5956-5961.
3. Harel, T., et al. 2005. COL11A2 mutation associated with autosomal recessive Weissenbacher-Zweymuller syndrome: molecular and clinical overlap with otospondylomegaepiphyseal dysplasia (OSMED). Am. J. Med. Genet. A 132A: 33-35.
4. Bläker, H., et al. 2008. Recurrent deletions at 6q in early age of onset non-HNPCC- and non-FAP-associated intestinal carcinomas. Evidence for a novel cancer susceptibility locus at 6q14-q22. Genes Chromosomes Cancer 47: 159-164.
5. Birk, E., et al. 2010. SOBP is mutated in syndromic and nonsyndromic intellectual disability and is highly expressed in the brain limbic system. Am. J. Hum. Genet. 87: 694-700.

CHROMOSOMAL LOCATION

Genetic locus: SOBP (human) mapping to 6q21; Sobp (mouse) mapping to 10 B2.

SOURCE

SOBP (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SOBP 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-169386 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

SOBP (P-14) is recommended for detection of SOBP of mouse, rat and 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)], 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).

SOBP (P-14) is also recommended for detection of SOBP in additional species, including canine.

Suitable for use as control antibody for SOBP siRNA (h): sc-95171, SOBP siRNA (m): sc-153679, SOBP shRNA Plasmid (h): sc-95171-SH, SOBP shRNA Plasmid (m): sc-153679-SH, SOBP shRNA (h) Lentiviral Particles: sc-95171-V and SOBP shRNA (m) Lentiviral Particles: sc-153679-V.

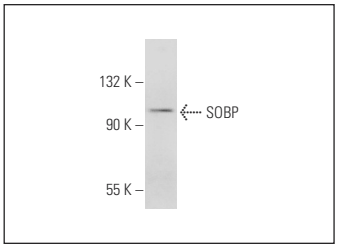
Molecular Weight of SOBP: 93 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



SOBP (P-14): sc-169386. Western blot analysis of SOBP expression in HeLa whole cell lysate.

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.