

**BACKGROUND**

OKL38 functions to regulate the differentiation and proliferation of cells, specifically by regulating apoptosis and cell death. OSGIN2 (oxidative stress-induced growth inhibitor 2) is a 505 amino acid protein that belongs to the OKL38 family. Though ubiquitously expressed, OSGIN2 is expressed at highest levels in ovary and testis, and may therefore be involved in meiosis or maturation of germ cells. The gene encoding OSGIN2 maps to human chromosome 8, which is made up of nearly 146 million bases and encodes about 800 genes. Translocation of portions of chromosome 8 with amplifications of the c-Myc gene are found in some leukemias and lymphomas, and are typically associated with a poor prognosis. Portions of chromosome 8 have been linked to schizophrenia and bipolar disorder. Chromosome 8 is also associated with Pfeiffer syndrome, congenital hypothyroidism and Waardenburg syndrome.

**REFERENCES**

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2. Tauchi, H., et al. 1999. Sequence analysis of an 800-kb genomic DNA region on chromosome 8q21 that contains the Nijmegen breakage syndrome gene, NBS1. *Genomics* 55: 242-247.
3. Kashino, G., et al. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. *Biochem. Biophys. Res. Commun.* 289: 111-115.
4. Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). *Genome Res.* 14: 2121-2127.
5. Ratliff, T.L. 2005. Genomic structure of human OKL38 gene and its differential expression in kidney carcinogenesis. *J. Urol.* 173: 1429-1430.
6. Nusbaum, C., et al. 2006. DNA sequence and analysis of human chromosome 8. *Nature* 439: 331-335.
7. Li, R., et al. 2007. OKL38 is an oxidative stress response gene stimulated by oxidized phospholipids. *J. Lipid Res.* 48: 709-715.

**CHROMOSOMAL LOCATION**

Genetic locus: OSGIN2 (human) mapping to 8q21.3; Osgin2 (mouse) mapping to 4 A2.

**SOURCE**

OSGIN2 (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of OSGIN2 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-82271 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

OSGIN2 (T-20) is recommended for detection of OSGIN2 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).

OSGIN2 (T-20) is also recommended for detection of OSGIN2 in additional species, including equine, canine, bovine, porcine and avian.

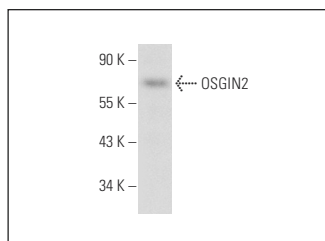
Suitable for use as control antibody for OSGIN2 siRNA (h): sc-76011, OSGIN2 siRNA (m): sc-76012, OSGIN2 shRNA Plasmid (h): sc-76011-SH, OSGIN2 shRNA Plasmid (m): sc-76012-SH, OSGIN2 shRNA (h) Lentiviral Particles: sc-76011-V and OSGIN2 shRNA (m) Lentiviral Particles: sc-76012-V.

Molecular Weight of OSGIN2: 57 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

**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**

OSGIN2 (T-20): sc-82271. Western blot analysis of OSGIN2 expression in Jurkat whole cell lysate.

**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](http://www.scbt.com) or our catalog for detailed protocols and support products.