# OSR2 (L-18): sc-67726



The Power to Question

## **BACKGROUND**

OSR (odd-skipped related) proteins belong to the odd  $C_2H_2$ -type zinc-finger protein family and are involved in embryonic development and bone formation. OSR2 (odd-skipped related 2) is a 312 amino acid protein that contains 5 zinc finger domains. It is expressed in the kidneys, skeletal muscle, testis and mouse embryos and may be involved in transcriptional activity and osteoblast function. The expression of OSR2 is regulated by C/EBP regulatory elements. OSR2 plays a role in regulating palatal development and expression of alkaline phosphatase. Two isoforms, OSR2A and OSR2B, are produced due to alternative splicing. OSR2B is 36 amino acids shorter than OSR2A and contains only 3 zinc finger motifs. Both isoforms localize to the nucleus and are thought to exhibit opposite transcriptional activities. Mutations in the gene encoding OSR2 can alter the gene expression of Pax-9 and TGF $\beta$ 3.

## **CHROMOSOMAL LOCATION**

Genetic locus: OSR2 (human) mapping to 8q22.2; Osr2 (mouse) mapping to 15 B3.1.

#### SOURCE

OSR2 (L-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of OSR2 of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-67726 P, (100  $\mu$ g 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**

OSR2 (L-18) is recommended for detection of OSR2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

OSR2 (L-18) is also recommended for detection of OSR2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for OSR2 siRNA (h): sc-62723, OSR2 siRNA (m): sc-62724, OSR2 shRNA Plasmid (h): sc-62723-SH, OSR2 shRNA Plasmid (m): sc-62724-SH, OSR2 shRNA (h) Lentiviral Particles: sc-62723-V and OSR2 shRNA (m) Lentiviral Particles: sc-62724-V.

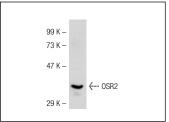
Molecular Weight of OSR2 isoforms: 36/31 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

## **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**



OSR2 (L-18): sc-67726. Western blot analysis of OSR2 expression in HeLa nuclear extract.

#### **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.



Try **OSR2 (H-8):** sc-393516, our highly recommended monoclonal alternative to OSR2 (L-18).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com