

OXR1 (C-14): sc-49470

BACKGROUND

Oxidative stress-responsive 1 protein (OXR1), a protein of 527 amino acids, belongs to the STE20 subfamily. OXR1 is one of two human homologs of Fray, a serine/threonine kinase expressed in *Drosophila*. OXR1 binds to and phosphorylates p21-activated protein kinase PAK1 and regulates downstream kinases in response to environmental stress. Endogenous OXR1 is activated only by osmotic stresses, notably sorbitol and, to a lesser extent, NaCl. OXR1 may also play a role in regulating the Actin cytoskeleton. The chloride channel proteins SLC12A1, SLC12A2 and SLC12A6 isoform 2 interact with OXR1, but SLC12A4 and SLC12A7 do not. The WNK1 and WNK4 protein kinases activate OXR1 by phosphorylating its T-loop. The OXR1 protein is widely expressed in mammalian tissues.

CHROMOSOMAL LOCATION

Genetic locus: OXR1 (human) mapping to 3p22.2; Oxsr1 (mouse) mapping to 9 F3.

SOURCE

OXR1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of OXR1 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-49470 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

OXR1 (C-14) is recommended for detection of OXR1 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).

OXR1 (C-14) is also recommended for detection of OXR1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for OXR1 siRNA (h): sc-61273, OXR1 siRNA (m): sc-61274, OXR1 shRNA Plasmid (h): sc-61273-SH, OXR1 shRNA Plasmid (m): sc-61274-SH, OXR1 shRNA (h) Lentiviral Particles: sc-61273-V and OXR1 shRNA (m) Lentiviral Particles: sc-61274-V.

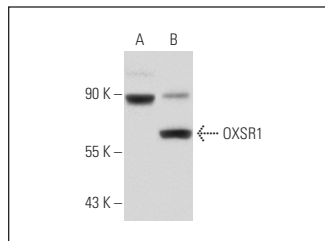
Molecular Weight of OXR1: 58 kDa.

Positive Controls: OXR1 (h3): 293 Lysate: sc-158793, HeLa whole cell lysate: sc-2200 or 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



OXR1 (C-14): sc-49470. Western blot analysis of OXR1 expression in non-transfected: sc-110760 (A) and human OXR1 transfected: sc-158793 (B) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

- Hengl, T., et al. 2010. Molecular components of signal amplification in olfactory sensory cilia. Proc. Natl. Acad. Sci. USA 107: 6052-6057.

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 **OXR1 (A-4): sc-271707** or **OXR1 (SQ-39): sc-100361**, our highly recommended monoclonal alternatives to OXR1 (C-14).