

# OB-cadherin (H-50): sc-28643

## BACKGROUND

The cadherins are a family of Ca<sup>2+</sup>-dependent adhesion molecules that influence cell-cell binding and are critical to the maintenance of tissue structure and morphogenesis. OB-cadherin (osteoblast-cadherin, cadherin-11, OSF-4) has two forms, OB-cadherin-1 and OB-cadherin-2. OB-cadherin-2 has a truncated cytoplasmic domain, missing amino acids 694-796. Both OB-cadherins are expressed in osteoblastic cell lines with low expression seen in lungs, testis and brain.

## REFERENCES

- Koch, P., et al. 1994. Desmosomal cadherins: another growing multigene family of adhesion molecules. *Curr. Opin. Cell Biol.* 6: 682-687.
- Ranscht, B. 1994. Cadherins and catenins: interactions and functions in embryonic development. *Curr. Opin. Cell Biol.* 6: 740-746.

## CHROMOSOMAL LOCATION

Genetic locus: CDH11/ CDH8 (human) mapping to 16q21; Cdh11/Cdh8 (mouse) mapping to 8 D2.

## SOURCE

OB-cadherin (H-50) is a rabbit polyclonal antibody raised against amino acids 681-730 mapping within a C-terminal cytoplasmic domain of OB-cadherin 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.

## STORAGE

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

## APPLICATIONS

OB-cadherin (H-50) is recommended for detection of OB-cadherin (cadherin-11) and, to a lesser extent cadherin-8 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).

OB-cadherin (H-50) is also recommended for detection of OB-cadherin (cadherin-11) and, to a lesser extent cadherin-8 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for OB-cadherin siRNA (h): sc-36113, OB-cadherin siRNA (m): sc-36114, OB-cadherin shRNA Plasmid (h): sc-36113-SH, OB-cadherin shRNA Plasmid (m): sc-36114-SH, OB-cadherin shRNA (h) Lentiviral Particles: sc-36113-V and OB-cadherin shRNA (m) Lentiviral Particles: sc-36114-V.

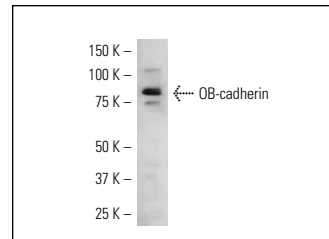
Molecular Weight of OB-cadherin: 115/85 kDa.

Positive Controls: rat brain extract: sc-2392.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



OB-cadherin (H-50): sc-28643. Western blot analysis of OB-cadherin expression in rat brain tissue extract.

## SELECT PRODUCT CITATIONS

- Capulli, M., et al. 2009. Global transcriptome analysis in mouse calvarial osteoblasts highlights sets of genes regulated by modeled microgravity and identifies a "mechanoresponsive osteoblast gene signature". *J. Cell. Biochem.* 107: 240-252.
- Sosa-García, B., et al. 2010. A role for the retinoblastoma protein as a regulator of mouse osteoblast cell adhesion: implications for osteogenesis and osteosarcoma formation. *PLoS ONE* 5: e13954.
- Torres, S., et al. 2013. Proteome profiling of cancer-associated fibroblasts identifies novel proinflammatory signatures and prognostic markers for colorectal cancer. *Clin. Cancer Res.* 19: 6006-6019.

## 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.


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Try **OB-cadherin (F-3): sc-365867**, our highly recommended monoclonal alternative to OB-cadherin (H-50).