SANTA CRUZ BIOTECHNOLOGY, INC.

# OB-cadherin (F-3): sc-365867

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

The cadherins are a family of $Ca^{2+}$-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


1. Koch, P., et al. 1994. Desmosomal cadherins: another growing multigene family of adhesion molecules. Curr. Opin. Cell Biol. 6: 682-687.
2. Ranscht, B. 1994. Cadherins and catenins: interactions and functions in embryonic development. Curr. Opin. Cell Biol. 6: 740-746.
3. Ayalon, O., et al. 1994. Spatial and temporal relationships between cadherins and PECAM-1 in cell-cell junctions of human endothelial cells. J. Cell Biol. 126: 247-258.
4. Takeichi, M. 1995. Morphogenetic roles of classic cadherins. Curr. Opin. Cell Biol. 7: 619-627.
5. LocusLink Report (LocusID: 1009). http://www.ncbi.nlm.nih.gov/LocusLink/


## CHROMOSOMAL LOCATION

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

## SOURCE

OB-cadherin (F-3) is a mouse monoclonal 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 $IgG_1$ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

OB-cadherin (F-3) is available conjugated to agarose (sc-365867 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-365867 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365867 PE), fluorescein (sc-365867 FITC), Alexa Fluor® 488 (sc-365867 AF488), Alexa Fluor® 546 (sc-365867 AF546), Alexa Fluor® 594 (sc-365867 AF594) or Alexa Fluor® 647 (sc-365867 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365867 AF680) or Alexa Fluor® 790 (sc-365867 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## STORAGE

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

## PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

## APPLICATIONS

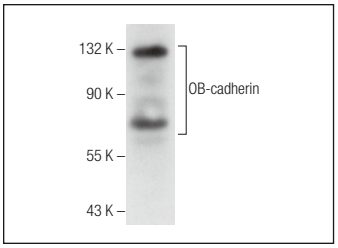
OB-cadherin (F-3) is recommended for detection of OB-cadherin (cadherin-11) of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

## DATA




OB-cadherin (F-3): sc-365867. Western blot analysis of OB-cadherin expression in rat brain tissue extract.

## SELECT PRODUCT CITATIONS


1. Viji Babu, P.K., et al. 2021. Homophilic and heterophilic cadherin bond rupture forces in homo- or hetero-cellular systems measured by AFM-based single-cell force spectroscopy. Eur. Biophys. J. 50: 543-559.
2. Li, D., et al. 2021. Pathogenic variants in CDH11 impair cell adhesion and cause Teebi hypertelorism syndrome. Hum. Genet. 140: 1061-1076.
3. Blasiak, J., et al. 2021. Epithelial-mesenchymal transition and senescence in the retinal pigment epithelium of NFE2L2/PGC-1α double knock-out mice. Int. J. Mol. Sci. 22: 1684.
4. González-Chávez, S.A., et al. 2023. Complete freund's adjuvant induces a fibroblast-like synoviocytes (FLS) metabolic and migratory phenotype in resident fibroblasts of the inoculated footpad at the earliest stage of adjuvant-induced arthritis. Cells 12: 842.


## RESEARCH USE

For research use only, not for use in diagnostic procedures.