SANTA CRUZ BIOTECHNOLOGY, INC.

OB-cadherin (C-16): sc-6463

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The cadherins are a family of Ca^{+}-dependent adhesion molecules that function to mediate cell-cell binding critical to the maintenance of tissue structure and morphogenesis. Cadherins each contain a large extracellular domain at the amino terminus, which is characterized by a series of five homologous repeats, the most distal of which is thought to be responsible for binding specificity. The relatively short carboxy-terminal, intracellular domain interacts with a variety of cytoplasmic proteins, including catenin β, to regulate cadherin function. Two forms of OB-cadherin (for osteoblast-cadherin, also designated cadherin-11 or OSF-4) have been identified as OB-cadherin-1 and OB-cadherin-2. Both OB-cadherins are expressed in osteoblastic cell lines and low expression is also seen in lungs, testis and brain. OB-cadherin-2 has a truncated cytoplasmic domain.

CHROMOSOMAL LOCATION

Genetic locus: CDH11 (human) mapping to 16q22.1; Cdh11 (mouse) mapping to 8 D2.

SOURCE

OB-cadherin (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus 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.

Blocking peptide available for competition studies, sc-6463 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

OB-cadherin (C-16) is recommended for detection of OB-cadherin 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 (C-16) is also recommended for detection of OB-cadherin 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: 111 kDa.

Positive Controls: rat brain extract: sc-2392.

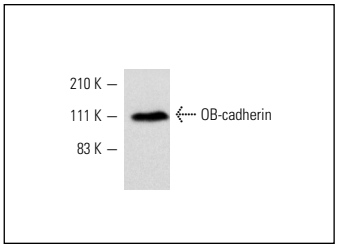
STORAGE

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.

DATA



OB-cadherin (C-16): sc-6463. Western blot analysis of OB-cadherin expression in rat brain extract.

SELECT PRODUCT CITATIONS

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3. Strutz, F., et al. 2002. Role of basic fibroblast growth factor-2 in epithelial-mesenchymal transformation. Kidney Int. 61: 1714-1728.
4. Forster, C., et al. 2002. Involvement of estrogen receptor β in terminal differentiation of mammary gland epithelium. Proc. Natl. Acad. Sci. USA 99: 15578-15583.
5. Klucky, B., et al. 2004. Polyomavirus tumorantigens have a profound effect on gene expression in mouse fibroblasts. Oncogene 23: 4707-4721.
6. Lai, C.F., et al. 2006. Accentuated ovariectomy-induced bone loss and altered osteogenesis in heterozygous N-cadherin null mice. J. Bone Miner. Res. 21: 1897-1906.
7. Molla-Herman, A., et al. 2010. The ciliary pocket: an endocytic membrane domain at the base of primary and motile cilia. J. Cell Sci. 123: 1785-1795.

PROTOCOLS

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