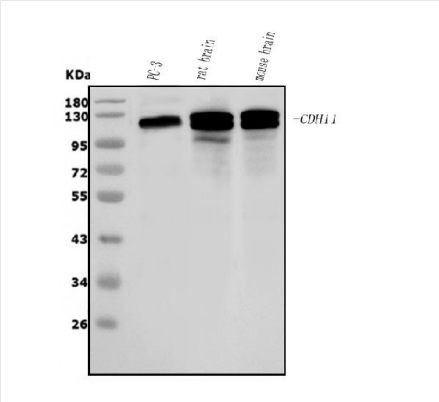
Ob Cadherin/CDH11 (CDH11) Antibody – Rabbit Polyclonal

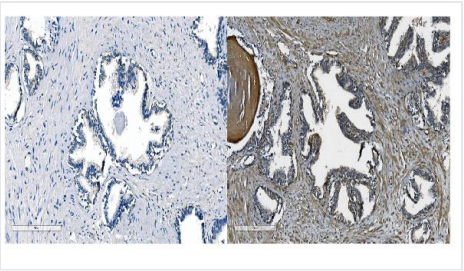
PRODUCT OVERVIEW

Product Name	OB Cadherin/CDH11, Polyclonal Antibody
Full Product Name	Anti-OB Cadherin/CDH11 Antibody
Product Gene Name	anti-CDH11 antibody
Product Synonym Names	CDH11; Cadherin-11; OSF-4; Osteoblast cadherin; OB-cadherin; cadherin 11
Clonality	Polyclonal
Isotype	Rabbit IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Purity/Purification	Immunogen affinity purified.
Specificity	Rabbit IgG polyclonal antibody for OB Cadherin/CDH11 detection.
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.
Molecular Weight	87,965 Da
Chromosome Location	Chromosome: 16; NC_000016.9 (64980683..65155919, complement). Location: 16q21
OMIM	600023
3D Structure	ModBase 3D Structure for P55287
Immunogen	E Coli-derived human OB Cadherin/CDH11 recombinant protein (Position: K371-S796).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Lab recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (MBS176460) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (MBS176453) for IHC(P).
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Applications Tested/Suitable for anti-CDH11 antibody	Western Blot (WB), Immunohistochemistry-Paraffin (IHC-P), Flow Cytometry (FC), Direct ELISA (EIA)
Application Notes for anti-CDH11 antibody	WB: Concentration: 0.25-0.5ug/ml; Tested Species: Human, Mouse, Rat IHC-P: Concentration: 2-5ug/ml; Tested Species: Human, Rat FC: Concentration: 1-3ug/1x106 cells; Tested Species: Human Direct ELISA: Concentration: 0.1-0.5ug/ml; Tested Species: Human Tested Species: In-house tested species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.
Related Product Information for anti-CDH11 antibody	Cadherin-11 is a protein that in humans is encoded by the CDH11 gene. This gene encodes a type II classical cadherin from the cadherin superfamily, integral membrane proteins that mediate calcium-dependent cell-cell adhesion. Mature cadherin proteins are composed of a large N-terminal extracellular domain, a single membrane-spanning domain, and a small, highly conserved C-terminal cytoplasmic domain. Type II (atypical) cadherins are defined based on their lack of a HAV cell adhesion recognition sequence specific to type I cadherins. Expression of this particular cadherin in osteoblastic cell lines, and its upregulation during differentiation, suggests a specific function in bone development and maintenance.

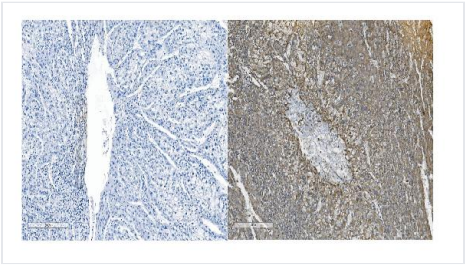
Product References and Citations for anti-CDH11 antibody	1. Kremmidiotis G, Baker E, Crawford J, Eyre HJ, Nahmias J, Callen DF (Aug 1998). "Localization of human cadherin genes to chromosome regions exhibiting cancer-related loss of heterozygosity". Genomics. 49 (3): 467-71. 2. Vogt L, Schrimpf SP, Meskenaite V, Frischknecht R, Kinter J, Leone DP, Ziegler U, Sonderegger P (2001). "Calsyntenin-1, a proteolytically processed postsynaptic membrane protein with a cytoplasmic calcium-binding domain". Mol. Cell. Neurosci. 17 (1): 151-66.
Other Notes	Small volumes of anti-CDH11 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CDH11 purchase	MBS1753660 is an antibody targeting CDH11. Also known as Anti-OB Cadherin/CDH11 Antibody. Reactive in Human, Mouse, Rat. Host: Rabbit.



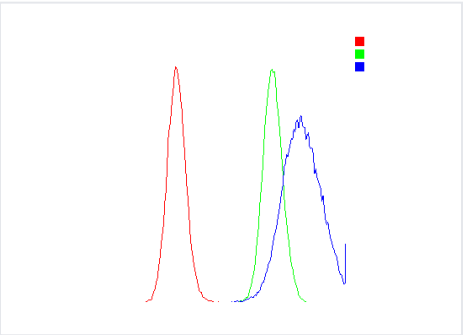
Western Blot (WB) of anti-CDH11 antibody
Figure 1. Western blot analysis of OB Cadherin/CDH11 using anti-OB Cadherin/CDH11 antibody (MBS1753660).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: human PC-3 whole cell lysatesLane 2: rat brain tissue lysatesLane 3: mouse brain tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-OB Cadherin/CDH11 antigen affinity purified polyclonal antibody (Catalog # MBS1753660) at 0. 5 ?g/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # MBS176460) with Tanon 5200 system. A specific band was detected for OB Cadherin/CDH11 at approximately 120KD. The expected band size for OB Cadherin/CDH11 is at 120KD.



Immunohistochemistry (IHC) of anti-CDH11 antibody
Figure 2. IHC analysis of OB Cadherin/CDH11 using anti-OB Cadherin/CDH11 antibody (MBS1753660).OB Cadherin/CDH11 was detected in paraffin-embedded section of human prostate cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2?g/ml rabbit anti-OB Cadherin/CDH11 Antibody (MBS1753660) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # MBS176451) with DAB as the chromogen.



Immunohistochemistry (IHC) of anti-CDH11 antibody
Figure 3. IHC analysis of OB Cadherin/CDH11 using anti-OB Cadherin/CDH11 antibody (MBS1753660).OB Cadherin/CDH11 was detected in paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2?g/ml rabbit anti-OB Cadherin/CDH11 Antibody (MBS1753660) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # MBS176451) with DAB as the chromogen.



Flow Cytometry (FC/FACS) of anti-CDH11 antibody
Figure 4. Flow Cytometry analysis of PC-3 cells using anti-OB Cadherin/CDH11 antibody (MBS1753660).Overlay histogram showing PC-3 cells stained with MBS1753660 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-OB Cadherin/CDH11 Antibody (MBS1753660, 1?g/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10?g/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1?g/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CDH11. It may not necessarily be applicable to this product.

NCBI GI #	16306532
NCBI GeneID	1009
NCBI Accession #	NP_001788.2
UniProt Primary Accession #	P55287
UniProt Secondary Accession #	Q15065; Q15066; Q9UQ93; Q9UQ94; A8K5D6; A8MZC8; B7WP28
UniProt Related Accession #	P55287
GenBank Nucleotide #	NM_001797.2
NCBI Official Full Name	cadherin-11 preproprotein
NCBI Official Synonym Full Names	cadherin 11, type 2, OB-cadherin (osteoblast)
NCBI Official Symbol	CDH11
NCBI Official Synonym Symbols	OB; CAD11; CDHOB; OSF-4
UniProt Protein Name	Cadherin-11
UniProt Synonym Protein Names	OSF-4; Osteoblast cadherin
Protein Family	Cadherin
UniProt Gene Name	CDH11
UniProt Synonym Gene Names	OB-cadherin
UniProt Entry Name	CAD11_HUMAN
NCBI Protein Information	cadherin-11
NCBI Summary for CDH11	This gene encodes a type II classical cadherin from the cadherin superfamily, integral membrane proteins that mediate calcium-dependent cell-cell adhesion. Mature cadherin proteins are composed of a large N-terminal extracellular domain, a single membrane-spanning domain, and a small, highly conserved C-terminal cytoplasmic domain. Type II (atypical) cadherins are defined based on their lack of a HAV cell adhesion recognition sequence specific to type I cadherins. Expression of this particular cadherin in osteoblastic cell lines, and its upregulation during differentiation, suggests a specific function in bone development and maintenance. [provided by RefSeq, Jul 2008]
UniProt Comments for CDH11	CDH11: Cadherins are calcium dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. Interacts with PCDH8. Expressed mainly in brain but also found in other tissues. Expressed in neuroblasts. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, integral; Cell adhesion; Motility/polarity/chemotaxis Chromosomal Location of Human Ortholog: 16q21 Cellular Component: cytoplasm; integral to membrane; plasma membrane Molecular Function: calcium ion binding Biological Process: intercellular junction assembly and maintenance; ossification; corticospinal tract morphogenesis; homophilic cell adhesion; cell adhesion; skeletal development
Research Articles on CDH11	**1.** Results indicate the necessity of cadherin-11 for dystrophic calcific nodule formation, which proceeds through an Erk1/2-dependent pathway.
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