

Product datasheet

Anti-BMP4 antibody ab235114

7 Images

Overview

Product name	Anti-BMP4 antibody
Description	Rabbit polyclonal to BMP4
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human, Zebrafish Predicted to work with: Rabbit, Cow, Deer
Immunogen	Recombinant fragment corresponding to Human BMP4 aa 303-408. Sequence: KKNKNCRRHSLYVDFSDVGWNDWIVAPPGYQAFYCHGD CPFPLADHLNST NHAVQTLVNSVNSSIPKACCVPTELSAISMLYLDEYDKVV LKNYQEMVV EGCGR Database link: P12644 Run BLAST with Run BLAST with
Positive control	WB: HeLa and A549 cell lysate; Mouse kidney, liver, brain and skeletal muscle lysate; Rat liver and kidney lysate; Whole Zebrafish lysate. IHC-P: Human prostate cancer, lung, small intestine and appendix tissue.
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p>

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.03% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine)
Purity	Protein G purified
Purification notes	Purity >95%.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab235114** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/5000.
IHC-P		1/20 - 1/200.

Target

Function	Induces cartilage and bone formation. Also act in mesoderm induction, tooth development, limb formation and fracture repair. Acts in concert with PTHLH/PTHRP to stimulate ductal outgrowth during embryonic mammary development and to inhibit hair follicle induction.
Tissue specificity	Expressed in the lung and lower levels seen in the kidney. Present also in normal and neoplastic prostate tissues, and prostate cancer cell lines.
Involvement in disease	Defects in BMP4 are the cause of microphthalmia syndromic type 6 (MCOPS6) [MIM:607932]; also known as microphthalmia and pituitary anomalies or microphthalmia with brain and digit developmental anomalies. Microphthalmia is a clinically heterogeneous disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues (anophthalmia). In many cases, microphthalmia/anophthalmia occurs in association with syndromes that include non-ocular abnormalities. MCOPS6 is characterized by microphthalmia/anophthalmia associated with facial, genital, skeletal, neurologic and endocrine anomalies. Defects in BMP4 are the cause of non-syndromic orofacial cleft type 11 (OFC11) [MIM:600625].

Non-syndromic orofacial cleft is a common birth defect consisting of cleft lips with or without cleft palate. Cleft lips are associated with cleft palate in two-third of cases. A cleft lip can occur on one or both sides and range in severity from a simple notch in the upper lip to a complete opening in the lip extending into the floor of the nostril and involving the upper gum. OFC11 is an unusual anomaly consisting of a paramedian scar of the upper lip with an appearance suggesting that a typical cleft lip was corrected in utero.

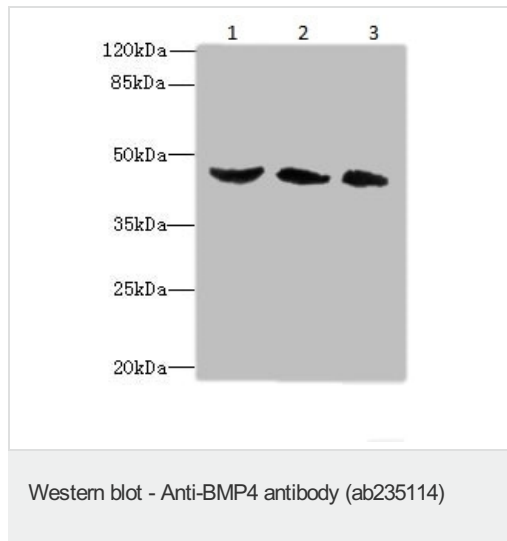
Sequence similarities

Belongs to the TGF-beta family.

Cellular localization

Secreted > extracellular space > extracellular matrix.

Images



All lanes : Anti-BMP4 antibody (ab235114) at 1/500 dilution

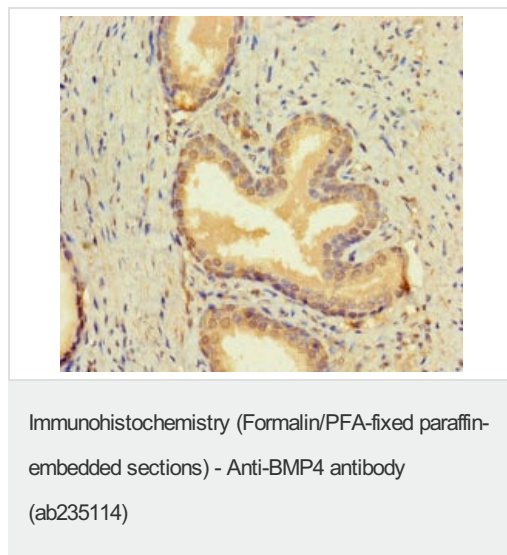
Lane 1 : Rat liver lysate

Lane 2 : A549 (human lung carcinoma cell line) cell lysate

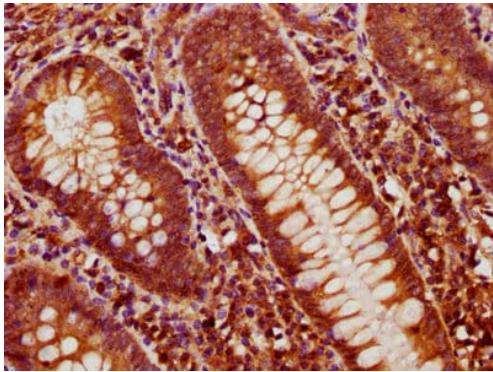
Lane 3 : HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate

Secondary

All lanes : Goat polyclonal to rabbit IgG at 1/10000 dilution



Paraffin-embedded human prostate cancer tissue stained for BMP4 using ab235114 at 1/100 dilution in immunohistochemical analysis.

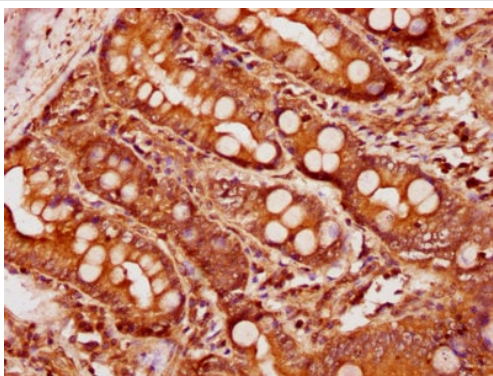


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BMP4 antibody (ab235114)

Paraffin-embedded human appendix tissue stained for BMP4 using ab235114 at 1/600 dilution in immunohistochemical analysis.

After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum for 30 minutes at room temperature.

Primary antibody (1% BSA) was incubated at 4°C overnight. The primary antibody was detected by a biotinylated secondary antibody and visualized using a HRP conjugated SP system.

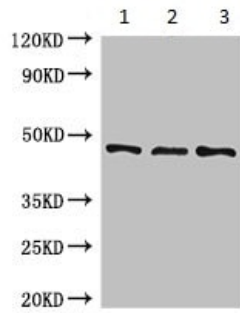


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BMP4 antibody (ab235114)

Paraffin-embedded human small intestine tissue stained for BMP4 using ab235114 at 1/600 dilution in immunohistochemical analysis.

After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum for 30 minutes at room temperature.

Primary antibody (1% BSA) was incubated at 4°C overnight. The primary antibody was detected by a biotinylated secondary antibody and visualized using a HRP conjugated SP system.



Western blot - Anti-BMP4 antibody (ab235114)

All lanes : Anti-BMP4 antibody (ab235114) at 1/500 dilution

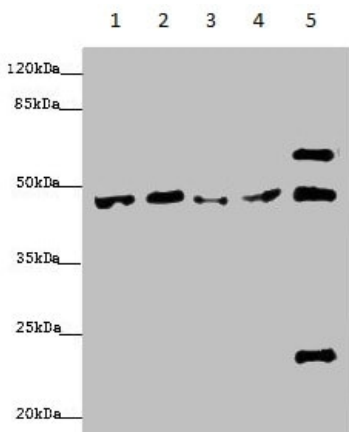
Lane 1 : Mouse brain lysate

Lane 2 : Mouse skeletal muscle lysate

Lane 3 : Whole Zebrafish lysate

Secondary

All lanes : Goat polyclonal to rabbit IgG at 1/50000 dilution



Western blot - Anti-BMP4 antibody (ab235114)

All lanes : Anti-BMP4 antibody (ab235114) at 1/500 dilution

Lane 1 : Mouse kidney lysate

Lane 2 : Mouse liver lysate

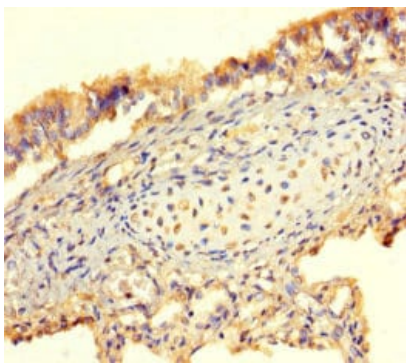
Lane 3 : Rat liver lysate

Lane 4 : Rat kidney lysate

Lane 5 : Whole Zebrafish lysate

Secondary

All lanes : Goat polyclonal to rabbit IgG at 1/10000 dilution



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BMP4 antibody (ab235114)

Paraffin-embedded human lung tissue stained for BMP4 using ab235114 at 1/100 dilution in immunohistochemical analysis.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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