# abcam

# Product datasheet

# Anti-BMP4 antibody ab39973

★★★★★ 14 Abreviews 87 References 画像数 4

#### 製品の概要

製品名 Anti-BMP4 antibody

製品の詳細 Rabbit polyclonal to BMP4

由来種 Rabbit

特異性 Replenishment batches of our polyclonal antibody, ab39973 are tested in WB. Previous batches

were additionally validated in ICC/IF. This application is still expected to work and is covered by our Abpromise guarantee. You may also be interested in our alternative recombinant antibody,

ab124715.

アプリケーション 適用あり: WB, ICC/IF

種交差性 交差種: Mouse, Rat, Human

交差が予測される動物種: Cow, Pig 🔷

免疫原 Synthetic peptide conjugated to KLH derived from within residues 50 - 150 of Human

BMP4.Immunogen の所有権に関して(Peptide available as <u>ab40140</u>.)

特記事項
The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**バッファー** pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

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精製度 Immunogen affinity purified

**ポリ/モノ** ポリクローナル

アイソタイプ lgG

#### アプリケーション

**The Abpromise guarantee Abpromise保証は、**次のテスト済みアプリケーションにおけるab39973の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	* * * * * * * (5)	Use a concentration of 1 µg/ml. Detects a band of approximately 47 kDa (predicted molecular weight: 47 kDa).
ICC/IF	*** <u>*</u> (1)	Use a concentration of 1 µg/ml.

## ターゲット情報

機能 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.

組織特異性 Expressed in the lung and lower levels seen in the kidney. Present also in normal and neoplastic

prostate tissues, and prostate cancer cell lines.

関連疾患 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.

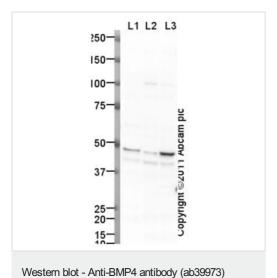
Defects in BMP4 are the cause of non-syndromic orofacial cleft type 11 (OFC11) [MIM:600625]. Non-syndromic orofacial cleft is a common birth defect consisting of cleft lips with or without cleft palate. Cleft lips are associated with cleft palate in two-third of cases. A cleft lip can occur on one or 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.

**配列類似性** Belongs to the TGF-beta family.

**細胞内局在** Secreted > extracellular space > extracellular matrix.

## 画像



All lanes : Anti-BMP4 antibody (ab39973) at 1  $\mu$ g/ml

Lane 1 : Human brain tissue lysate - total protein (ab29466)

Lane 2 : Brain (Mouse) Tissue Lysate
Lane 3 : Brain (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

#### **Secondary**

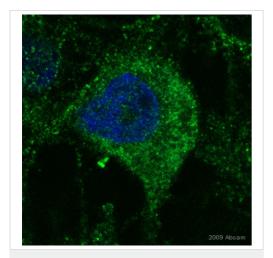
All lanes: Goat Anti-Rabbit IgG H&L (HRP) preadsorbed

(ab97080) at 1/5000 dilution

**Predicted band size:** 47 kDa **Observed band size:** 47 kDa

Additional bands at: 42 kDa. We are unsure as to the identity of

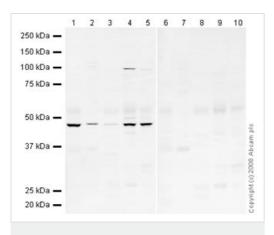
these extra bands.



Immunocytochemistry/ Immunofluorescence - Anti-BMP4 antibody (ab39973)

This image is courtesy of Ruma Raha-Chowdhury, University Of Cambridge, United Kingdom

ICC/IF image of ab39973 staining primary Rat hippocampal neurons. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 5% normal donkey serum / 0.3M glycine in 0.1% PBS-Tritonx100 for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab39973, 1 $\mu$ g/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488donkey anti-rabbit lgG (H+L) used at a 1/1000 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 $\mu$ M.



Western blot - Anti-BMP4 antibody (ab39973)

All lanes: Anti-BMP4 antibody (ab39973) at 1 µg/ml

Lane 1: Human brain tissue lysate - total protein (ab29466)

Lane 2: Brain (Mouse) Mouse Tissue Lysate

Lane 3: Human liver tissue lysate - total protein (ab29889)

Lane 4: Human heart tissue lysate - total protein (ab29431)

Lane 5: Human skeletal muscle tissue lysate - total protein (ab29330)

**Lane 6 :** Human brain tissue lysate - total protein ( $\underline{ab29466}$ ) with Human BMP4 peptide ( $\underline{ab40140}$ ) at 1 µg/ml

**Lane 7 :** Brain (Mouse) Mouse Tissue Lysate with Human BMP4 peptide (ab40140) at 1  $\mu$ g/ml

**Lane 8 :** Human liver tissue lysate - total protein ( $\underline{ab29889}$ ) with Human BMP4 peptide ( $\underline{ab40140}$ ) at 1  $\mu$ g/ml

**Lane 9 :** Human heart tissue lysate - total protein (<u>ab29431</u>) with Human BMP4 peptide (<u>ab40140</u>) at 1  $\mu$ g/ml

**Lane 10 :** Human skeletal muscle tissue lysate - total protein (ab29330) with Human BMP4 peptide (ab40140) at 1  $\mu$ g/ml

Lysates/proteins at 10 µg per lane.

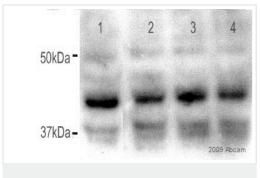
#### **Secondary**

**All lanes :** IRDye 680 Conjugated Goat Anti-Rabbit lgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 47 kDa

ab39973 detects a 47kDa band that we believe corresponds to the pre-cleaved form of BMP4 with the immunizing peptide raised against a region located in the propeptide. Abcam welcomes customer feedback and would appreciate any comments regarding this product and the data presented above.



Western blot - Anti-BMP4 antibody (ab39973)

This image is courtesy of Ruma Raha-Chowdhury, University Of Cambridge, United Kingdom

All lanes: Anti-BMP4 antibody (ab39973) at 1/1000 dilution

All lanes: mouse brain

Lysates/proteins at 20 µg per lane.

## Secondary

**All lanes:** Dako Cytomation P0260 Conjugation: HRP at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 47 kDa

Exposure time: 1 minute

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

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