

## Product datasheet

# Human BMP-4 Antibody Pair - BSA and Azide free ab244079

Recombinant RabMAb

[4 Images](#)

### Overview

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**Product name** Human BMP-4 Antibody Pair - BSA and Azide free

**Assay type** ELISA set

**Range** 12 pg/ml - 750 pg/ml

**Species reactivity** **Reacts with:** Human

**Product overview** The Antibody Pair can be used to quantify Human BMP-4. BSA and Azide free antibody pairs include unconjugated capture and detector antibodies suitable for sandwich ELISAs. The antibodies are provided at an approximate concentration of 1 mg/ml as measured by the protein A280 method. The recommended antibody orientation is based on internal optimization for ELISA-based assays. Antibody orientation is assay dependent and needs to be optimized for each assay type. Both capture and detector antibodies are rabbit monoclonal antibodies delivering consistent, specific, and sensitive results.

For additional information on the performance of the antibody pair, see the equivalent SimpleStep ELISA® Kit ([ab231930](#)), which uses the same antibodies. However, due to differences in their formulation, this antibody pair cannot be used with the consumables provided with our SimpleStep ELISA Kits. Please note that the range provided for the pairs is only an estimation based on the performance of the related product using the same antibody pair. Performance of the antibody pair will depend on the specific characteristics of your assay. We guarantee the product works in sandwich ELISA, but we do not guarantee the sensitivity or dynamic range of the antibody pair in your assay.

**Tested applications** **Suitable for:** Sandwich ELISA

**Platform** Reagents

### Properties

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**Storage instructions** Store at +4°C. Please refer to protocols.

**Carrier free** Yes

Components	10 x 96 tests
Human BMP-4 Capture Antibody (unconjugated)	1 x 100µg
Human BMP-4 Detector Antibody (unconjugated)	1 x 100µg

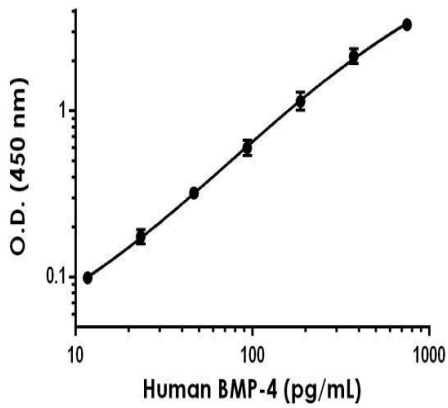
<b>Function</b>	Induces cartilage and bone formation. Also act in mesoderm induction, tooth development, limb formation and fracture repair. Acts in concert with PTHLH/PTHRP to stimulate ductal outgrowth during embryonic mammary development and to inhibit hair follicle induction.
<b>Tissue specificity</b>	Expressed in the lung and lower levels seen in the kidney. Present also in normal and neoplastic prostate tissues, and prostate cancer cell lines.
<b>Involvement in disease</b>	<p>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.</p> <p>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.</p>
<b>Sequence similarities</b>	Belongs to the TGF-beta family.
<b>Cellular localization</b>	Secreted > extracellular space > extracellular matrix.

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab244079 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

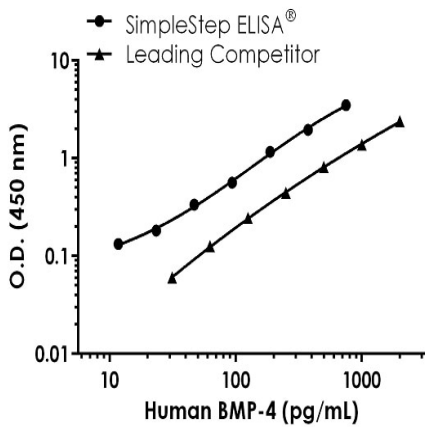
Application	Abreviews	Notes
<b>Sandwich ELISA</b>		Use at an assay dependent concentration.

## Images



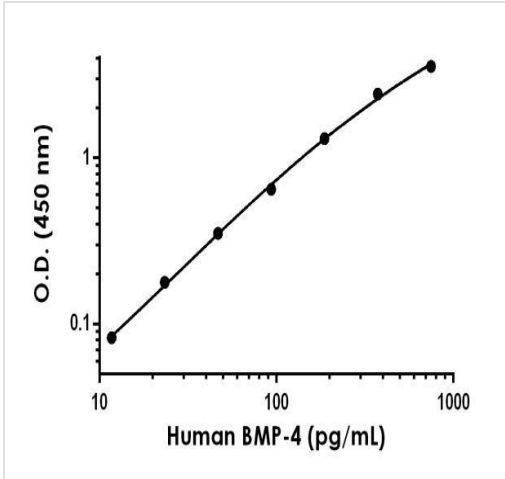
Sandwich ELISA - Human BMP-4 Antibody Pair - BSA and Azide free (ab244079)

Representative standard curve from corresponding SimpleStep ELISA® Kit ([ab231930](#)), which uses the same antibody pair. For additional information on the performance of pair and kit, refer to the corresponding kit datasheet. Due to differences in the formulation and format of the antibodies in this pair, they cannot be used as substitutes for the antibody components in our SimpleStep ELISA® Kits.



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Powered by  
recombinant antibodies

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

To learn more about the advantages of recombinant antibodies see [here](#).

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

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