Product datasheet

Anti-BMP2 antibody ab14933

Overview

Product name: Anti-BMP2 antibody
Description: Rabbit polyclonal to BMP2
Host species: Rabbit
Specificity: ab14933 detects only the pro-form of the BMP2
Tested applications: Suitable for: Dot blot, ELISA, WB, ICC/IF, IHC-Fr, IHC-P
Species reactivity: Reacts with: Mouse, Rat, Human
Immunogen: Synthetic peptide corresponding to Mouse BMP2 aa 45-60 (N terminal) conjugated to Keyhole Limpet Haemocyanin (KLH).
Sequence: SEDVLSEFELRLLSMF

Database link: P21274
(Peptide available as ab80798)

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer: pH: 7.40
Preservative: 0.02% Sodium azide
 Constituents: 30% Glycerol, 0.75% BSA

The antibody is provided in antibody stabilization buffer containing phosphate buffer, pH 7.4, glycerol, stabilizing proteins and preservatives. The exact buffer contents are considered proprietary.

Purity: Immunogen affinity purified
Clonality: Polyclonal
Isotype: IgG
Function
Induces cartilage and bone formation.

Tissue specificity
Particularly abundant in lung, spleen and colon and in low but significant levels in heart, brain, placenta, liver, skeletal muscle, kidney, pancreas, prostate, ovary and small intestine.

Sequence similarities
Belongs to the TGF-beta family.

Cellular localization
Secreted.

Applications

Our Abpromise guarantee covers the use of ab14933 in the following tested applications.

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

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td>⭐⭐⭐⭐⭐</td>
<td>1/500 - 1/1000. Detects a band of approximately 45 kDa. Can be blocked with Mouse BMP2 peptide (ab80798).</td>
</tr>
<tr>
<td>ICC/IF</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use a concentration of 1 µg/ml.</td>
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<tr>
<td>IHC-Fr</td>
<td>⭐⭐⭐⭐⭐</td>
<td>1/250 - 1/500.</td>
</tr>
<tr>
<td>IHC-P</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>

Target

Function
Induces cartilage and bone formation.

Tissue specificity
Particularly abundant in lung, spleen and colon and in low but significant levels in heart, brain, placenta, liver, skeletal muscle, kidney, pancreas, prostate, ovary and small intestine.

Sequence similarities
Belongs to the TGF-beta family.

Cellular localization
Secreted.

Images

Anti-BMP2 antibody (ab14933) at 1/500 dilution + BMP2 Purified Protein

Western blot - Anti-BMP2 antibody (ab14933)
Immunohistochemistry (Frozen sections) - Anti-BMP2 antibody (ab14933)
This image is courtesy of an Abreview submitted by Mr Siim Suutre

ab14933 at 1/500 dilution staining human bone tissue sections by Immunohistochemistry (Frozen sections). The tissue was fixed with methanol and blocked with BSA prior to incubation with the antibody for 14 hours. StreptABComplex/HRP duet was used as the secondary antibody in this experiment. In the image specific staining is shown in brown at the site of new bone formation. The blue color is due to toluidine background staining.

Immunocytochemistry/ Immunofluorescence - Anti-BMP2 antibody (ab14933)
This image is courtesy of Ruma Raha-Chowdhury, University Of Cambridge, United Kingdom

ICC/IF image of Rat primary hepatocytes culture cells stained with ab14933. The cells were fixed with 4% PFA, and incubated in 5% normal donkey serum in 0.1% PBS- and triton X100 for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab14933, 1µg/ml) and (ab15640) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 568 (red) at a 1/1000 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Immunocytochemistry/ Immunofluorescence - Anti-BMP2 antibody (ab14933)
This image is courtesy of an anonymous Abreview.

ab14933 at 1/200 dilution staining BMP2 in human 293FT cells by Immunocytochemistry/ Immunofluorescence. Cells were fixed in formaldehdye and blocked in 5% BSA for 1 hour at 25°C. The primary antibody was used at 1/200 dilution in PBS and incubated with sample at 4°C for 12 hours. An Alexa Fluor® 488 conjugated Goat polyclonal to rabbit IgG was used as secondary at 1/200 dilution. Cells were cultured in DMEM containing 10% FBS and Nuclei stained with DAPI.
Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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