**Product datasheet**

**Anti-GDF11 + GDF8/Myostatin antibody [EPR4567(2)]**

**ab124721**

![Recombinant RabMAb](https://www.abcam.com/)

★★★★☆ 6 Abreviews  26 References  11 Images

**Overview**

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-GDF11 + GDF8/Myostatin antibody [EPR4567(2)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Rabbit monoclonal [EPR4567(2)] to GDF11 + GDF8/Myostatin</td>
</tr>
<tr>
<td>Host species</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Tested applications</td>
<td>Suitable for: Flow Cyt (Intra), ICC/IF, WB, IHC-P</td>
</tr>
<tr>
<td>Species reactivity</td>
<td>Reacts with: Mouse, Rat, Human</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Synthetic peptide within Human GDF11 + GDF8/Myostatin aa 350 to the C-terminus. The exact sequence is proprietary.</td>
</tr>
<tr>
<td>Database link</td>
<td>O95390</td>
</tr>
</tbody>
</table>

**General notes**

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

**We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.**

**Properties**

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage instructions</td>
<td>Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.</td>
</tr>
</tbody>
</table>
Dissociation constant \((K_D)\)  
\[ K_D = 6.40 \times 10^{-11} \text{ M} \]

Storage buffer  
- pH: 7.20  
- Preservative: 0.01% Sodium azide  
- Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS

Purity  
- Protein A purified

Clonality  
- Monoclonal

Clone number  
- EPR4567(2)

Isotype  
- IgG

Applications

The Abpromise guarantee  
Our Abpromise guarantee covers the use of ab124721 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>Flow Cyt (Intra)</td>
<td></td>
<td>Use at an assay dependent concentration. Purified format.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td></td>
<td>1/250.</td>
</tr>
<tr>
<td>WB</td>
<td>★★★★★ (1)</td>
<td>1/1000 - 1/2000. Detects a band of approximately 45 kDa (predicted molecular weight: 45 kDa).</td>
</tr>
<tr>
<td>IHC-P</td>
<td>★★★★★ (4)</td>
<td>1/1000 - 1/2500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols. For unpurified use at 1/500 - 1/1000.</td>
</tr>
</tbody>
</table>

Target

Relevance  
O95390: Function - Secreted signal that acts globally to specify positional identity along the anterior/posterior axis during development. Play critical roles in patterning both mesodermal and neural tissues and in establishing the skeletal pattern. O14793: Function - Acts specifically as a negative regulator of skeletal muscle growth.

Images
Western blot - Anti-GDF11 + GDF8/Myostatin antibody [EPR4567(2)] (ab124721)

Anti-GDF11 + GDF8/Myostatin antibody [EPR4567(2)] (ab124721) at 1/1000 dilution + C2C12 (mouse myoblast) whole cell lysates at 20 µg

Secondary
Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 45 kDa
Additional bands at: 45 kDa. We are unsure as to the identity of these extra bands.

Blocking and Diluting buffer: 5% NFDM /TBST

Western blot - Anti-GDF11 + GDF8/Myostatin antibody [EPR4567(2)] (ab124721)

Anti-GDF11 + GDF8/Myostatin antibody [EPR4567(2)] (ab124721) at 1/1000 dilution (purified) + HEK293 cell lysate at 20 µg

Secondary
Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 45 kDa
Observed band size: 45 kDa

Blocking buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM /TBST.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon adenocarcinoma tissue labelling BMP11 + GDF8/Myostatin with unpurified ab124721 at 1/500 dilution. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

ab124721 staining GDF11 + GDF8/Myostatin in the human cell line HeLa (human cervix adenocarcinoma) by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde, permabilised with 90% methanol and the sample was incubated with the primary antibody at a dilution of 1/250. A goat anti rabbit IgG (Alexa Fluor® 488) at a dilution of 1/2000 was used as the secondary antibody. Isotype control: Rabbit monoclonal IgG (Black) Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)

Anti-GDF11 + GDF8/Myostatin antibody [EPR4567(2)] (ab124721) at 1/5000 dilution (purified) + HeLa cell lysate at 10 µg

Secondary
Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 45 kDa
Observed band size: 45 kDa

Blocking buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM/TBST.
Anti-GDF11 + GDF8/Myostatin antibody [EPR4567(2)] (ab124721) at 1/1000 dilution (purified) + C6 cell lysate at 20 µg

**Secondary**
Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

**Predicted band size:** 45 kDa

**Observed band size:** 45 kDa

Blocking buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM/TBST.

**All lanes:** Anti-GDF11 + GDF8/Myostatin antibody [EPR4567(2)] (ab124721) at 1/1000 dilution (unpurified)

Lane 1: HeLa cell lysate
Lane 2: Human heart tissue lysate

Lysates/proteins at 10 µg per lane.

**Secondary**
**All lanes:** HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

**Predicted band size:** 45 kDa
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cerebral cortex tissue labelling BMP11 + GDF8/Myostatin with purified ab124721 at 1/2500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A prediluted HRP-polymer conjugated anti-rabbit IgG was used as the secondary antibody. Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

Immunohistochemistry/Immunofluorescence analysis of A549 cells labelling BMP11 + GDF8/Myostatin with purified ab124721 at 1/250. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% triton X-100. ab150078, an Alexa Fluor® 555-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain.

Control: primary antibody (1/250) and secondary antibody, ab150113, an Alexa Fluor® 488-conjugated goat anti-mouse IgG (1/500).

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D
Anti-GDF11 + GDF8/Myostatin antibody
[EPR4567(2)] (ab124721)

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