### Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-GDF15 antibody [EPR19939]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Rabbit monoclonal [EPR19939] to GDF15</td>
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<tr>
<td>Host species</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Tested applications</td>
<td>Suitable for: IHC-P, WB, IP</td>
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<tr>
<td>Species reactivity</td>
<td>Reacts with: Human</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Recombinant fragment within Human GDF15 aa 150 to the C-terminus. The exact sequence is proprietary. Database link: Q99988</td>
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<tr>
<td>Positive control</td>
<td>WB: HepG2 and LNCaP whole cell lysates; human prostate cancer and placenta lysates; untreated HT1080 and treated with 200ng/ml Phorbol-12-myristate-13-acetate (TPA) for 24 hours whole cell lysates. IHC-P: Human placenta and prostate hyperplasia tissues. IP: HepG2 whole cell lysate.</td>
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<tr>
<td>General notes</td>
<td>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.</td>
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</table>

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

### Properties

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
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<tbody>
<tr>
<td>Storage buffer</td>
<td>Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA</td>
</tr>
<tr>
<td>Purity</td>
<td>Protein A purified</td>
</tr>
<tr>
<td>Clonality</td>
<td>Monoclonal</td>
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</tbody>
</table>
Clone number  
EPR19939

Isotype  
IgG

Applications

Our Abpromise guarantee covers the use of ab206414 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>
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<tbody>
<tr>
<td>IHC-P</td>
<td>1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. IHC tests show positive staining only on human placenta and prostate hyperplasia tissues, other tissues tested were negative.</td>
<td></td>
</tr>
<tr>
<td>WB</td>
<td>1/1000. Detects a band of approximately 35, 12.5 kDa (predicted molecular weight: 34 kDa).</td>
<td></td>
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<tr>
<td>IP</td>
<td>1/30.</td>
<td></td>
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</tbody>
</table>

Target

Tissue specificity  
Highly expressed in placenta, with lower levels in prostate and colon and some expression in kidney.

Sequence similarities  
Belongs to the TGF-beta family.

Cellular localization  
Secreted.

Images

All lanes: Anti-GDF15 antibody [EPR19939] (ab206414) at 1/1000 dilution

Lane 1: HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

Lane 2: LNCaP (Human prostate cancer cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes: Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 34 kDa

Observed band size: 12.5, 35 kDa

why is the actual band size different from the predicted?
Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1: 3 minutes; Lane 2: 10 seconds.

The molecular weight observed is consistent with the literature (PMID: 20884666).

**All lanes**: Anti-GDF15 antibody [EPR19939] (ab206414) at 1/1000 dilution

**Lane 1**: Human prostate cancer lysate  
**Lane 2**: Human placenta lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes**: Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

**Predicted band size**: 34 kDa  
**Observed band size**: 12.5 kDa  
*why is the actual band size different from the predicted?*

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1: 10 seconds; Lane 2: 3 minutes.

The molecular weight observed is consistent with the literature (PMID: 20884666).
**Western blot - Anti-GDF15 antibody [EPR19939] (ab206414)**

**All lanes**: Anti-GDF15 antibody [EPR19939] (ab206414) at 1/1000 dilution

**Lane 1**: Untreated HT1080 (Human fibrosarcoma cell line) whole cell lysate

**Lane 2**: HT1080 (Human fibrosarcoma cell line) whole cell lysate treated with 200ng/ml Phorbol-12-myristate-13-acetate (TPA) for 24 hours

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes**: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

**Predicted band size**: 34 kDa

**Observed band size**: 35 kDa

**why is the actual band size different from the predicted?**

**Exposure time**: 3 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The expression level of GDF15 can be increased by TPA treatment (PMID: 15757899).

**Western blot - Anti-GDF15 antibody [EPR19939] (ab206414)**

**All lanes**: Anti-GDF15 antibody [EPR19939] (ab206414) at 1/1000 dilution

**Lane 1**: Untreated HT1080 (Human fibrosarcoma cell line) whole cell lysate

**Lane 2**: HT1080 (Human fibrosarcoma cell line) whole cell lysate treated with 200ng/ml Phorbol-12-myristate-13-acetate (TPA) for 24 hours

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes**: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

**Predicted band size**: 34 kDa

**Observed band size**: 35 kDa

**why is the actual band size different from the predicted?**
**Exposure time:** 1 minute

Blocking/Dilution buffer: 5% NFDM/TBST.

Both pro and mature form can be increased by TPA treatment.

Immunohistochemical analysis of paraffin-embedded human placenta tissue labeling GDF15 with ab206414 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasmic staining on human placenta is observed (PMID: 9593718). Positive staining on human placenta and prostate hyperplasia, other tissues tested were negative.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemical analysis of paraffin-embedded human prostate hyperplasia tissue labeling GDF15 with ab206414 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasmic staining on human prostate hyperplasia is observed (PMID: 9593718). Positive staining on human placenta and prostate hyperplasia, other tissues tested were negative.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
GDF15 was immunoprecipitated from 0.35 mg of HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate with ab206414 at 1/30 dilution.

Western blot was performed from the immunoprecipitate using ab206414 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1000 dilution.

Lane 1: HepG2 whole cell lysate 10µg (Input).
Lane 2: ab206414 IP in HepG2 whole cell lysate.
Lane 3: Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) instead of ab206414 in HepG2 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.
Exposure time: 10 seconds.

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

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