Product datasheet

Anti-GDF15 antibody [EPR19939] ab206414

Overview

Product name: Anti-GDF15 antibody [EPR19939]
Description: Rabbit monoclonal [EPR19939] to GDF15
Host species: Rabbit
Tested applications: Suitable for: IHC-P, WB, IP
Species reactivity: Reacts with: Human
Immunogen: Recombinant fragment within Human GDF15 aa 150 to the C-terminus. The exact sequence is proprietary.
Database link: Q99988
Positive control: 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.
General notes: Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.
This product is a recombinant rabbit monoclonal antibody.

Properties

Form: Liquid
Storage buffer: Preservative: 0.01% Sodium azide
Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity: Protein A purified
Clonality: Monoclonal
Clone number: EPR19939
Isotype: IgG

Applications
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.

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>
</thead>
<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>
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<tr>
<td>WB</td>
<td>1/1000. Detects a band of approximately 35, 12.5 kDa (predicted molecular weight: 34 kDa).</td>
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<tr>
<td>IP</td>
<td>1/30.</td>
<td></td>
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Target

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<th>Tissue specificity</th>
<th>Highly expressed in placenta, with lower levels in prostate and colon and some expression in kidney.</th>
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</table>

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).

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 Phorbolester-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).

**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.

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.
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"