abcam

Product datasheet

# Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free ab234965

敲除验证 重组 RabMAb

1 Abreviews 2 References 16 图像

## 概述

| | |
|---|---|
| **产品名称** | Anti-PDGFR alpha抗体[EPR22059-270] - BSA and Azide free |
| **描述** | 兔单克隆抗体[EPR22059-270] to PDGFR alpha - BSA and Azide free |
| **宿主** | Rabbit |
| **特异性** | PDGFR alpha is membrane protein, so enrichment of membrane could help increasing the detection level of PDGFR alpha. |
| **经测试应用** | **适用于:** IHC-Fr, Indirect ELISA, WB, IHC-P, ICC/IF, Flow Cyt, IP |
| **种属反应性** | **与反应:** Mouse, Rat, Human |
| **免疫原** | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers. |
| **阳性对照** | WB: SH-SY5Y, A-204, MG-63, C6, and NIH/3T3 whole cell lysates. IHC-P: Mouse E14.5 lung, E14.5 intervertebral disc and uterus tissues; Rat E14.5 intervertebral disc tissue and Human endometrium tissue. ICC/IF: SH-SY5Y and A-204 cells. Flow Cyt: NIH/3T3 and A-204 cells. IP: A-204 whole cell lysate |
| **常规说明** | ab234965 is the carrier-free version of **ab203491**.<br><br>Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.<br><br>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.<br><br>Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.<br><br>This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.<br><br>This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- 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**.

## 性能

| | |
|---|---|
| **形式** | Liquid |
| **存放说明** | Shipped at 4°C. Store at +4°C. Do Not Freeze. |
| **存储溶液** | pH: 7.2<br>Constituent: PBS |
| **无载体** | **是** |
| **纯度** | Protein A purified |
| **克隆** | 单克隆 |
| **克隆编号** | EPR22059-270 |
| **同种型** | IgG |

## 应用

**The Abpromise guarantee** **Abpromise™承诺保证使用**ab234965**于以下的**经测试应用

"应用说明"**部分 下显示的**仅为**推荐的起始稀释度**;实际**最佳的稀释度**/浓**度应由使用者检定。**

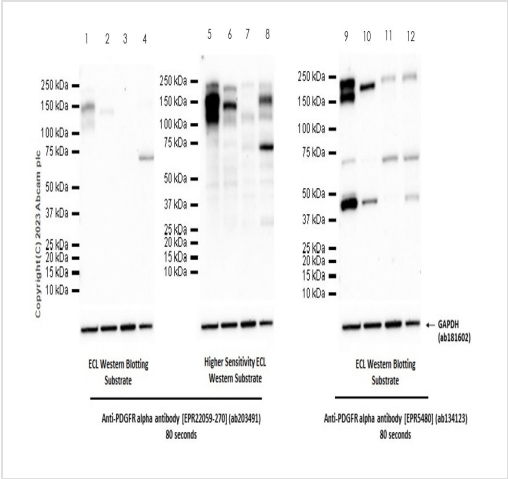
| 应用 | Ab评论 | 说明 |
|---|---|---|
| **IHC-Fr** | ★★★★☆ (1) | Use at an assay dependent concentration. |
| **Indirect ELISA** | | Use at an assay dependent concentration. |
| **WB** | | Use at an assay dependent concentration. Detects a band of approximately 150, 180 kDa (predicted molecular weight: 122 kDa). |
| **IHC-P** | | Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |
| **ICC/IF** | | Use at an assay dependent concentration. |
| **Flow Cyt** | | Use at an assay dependent concentration. |
| **IP** | | Use at an assay dependent concentration. |

## 靶标

| | |
|---|---|
| **功能** | Receptor that binds both PDGFA and PDGFB and has a tyrosine-protein kinase activity. |
| **组织特异性** | Expressed in primary and metastatic colon tumors and in normal colon tissue. Tumors may |

| | |
|---|---|
| | express a different isoform to that found in normal tissue. |
| **疾病相关** | Note=A chromosomal aberration involving PDGFRA is found in some cases of hypereosinophilic syndrome. Interstitial chromosomal deletion del(4)(q12q12) causes the fusion of FIP1L1 and PDGFRA (FIP1L1-PDGFRA). |
| **序列相似性** | Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily.<br>Contains 5 Ig-like C2-type (immunoglobulin-like) domains.<br>Contains 1 protein kinase domain. |
| **细胞定位** | Membrane. |

## 图片




Western blot - Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

**Lanes 1-8 :** Anti-PDGFR alpha antibody [EPR22059-270] (**ab203491**) at 1/1000 dilution
**Lanes 9-12 :** Anti-PDGFR alpha antibody [EPR5480] (**ab134123**) at 1/1000 dilution

**Lanes 1 & 5 & 9 :** SH-SY5Y
**Lanes 2 & 6 & 10 :** Human brain tissue lysate at 20 µg
**Lanes 3 & 7 & 11 :** Human heart tissue lysate at 20 µg
**Lanes 4 & 8 & 12 :** Human lung tissue lysate at 20 µg

**Secondary**
**All lanes :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

**Predicted band size:** 122 kDa
**Observed band size:** 150 kDa

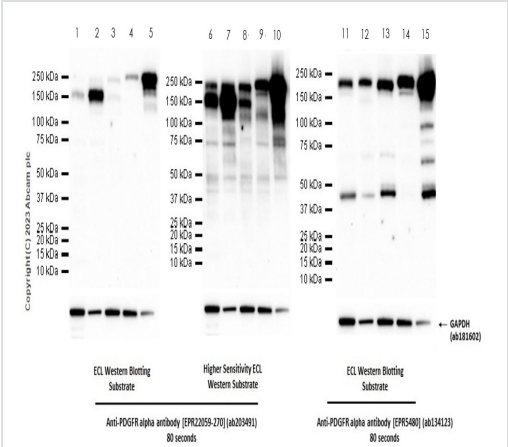
**Exposure time:** 80 seconds

This data was developed using the same antibody clone in a different buffer formulation (**ab203491**).

Blocking/Dilution buffer: 5% NFDM/TBST.

We recommend using higher sensitivity ECL to improve results.

**ab134123** can be a good alternative when testing samples with low level of PDGFR alpha which detects stronger signal than **ab203491** in western blot.




Western blot - Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

**Lanes 1-10 :** Anti-PDGFR alpha antibody [EPR22059-270] (**ab203491**) at 1/1000 dilution
**Lanes 11-15 :** Anti-PDGFR alpha antibody [EPR5480] (**ab134123**) at 1/1000 dilution

**Lanes 1 & 6 & 11 :** Rat heart tissue lysate
**Lanes 2 & 7 & 12 :** Rat lung tissue lysate
**Lanes 3 & 8 & 13 :** Mouse brain tissue lysate
**Lanes 4 & 9 & 14 :** Mouse heart tissue lysate
**Lanes 5 & 10 & 15 :** Mouse lung tissue lysate

Lysates/proteins at 20 µg per lane.

**Secondary**
**All lanes :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

**Predicted band size:** 122 kDa
**Observed band size:** 150 kDa

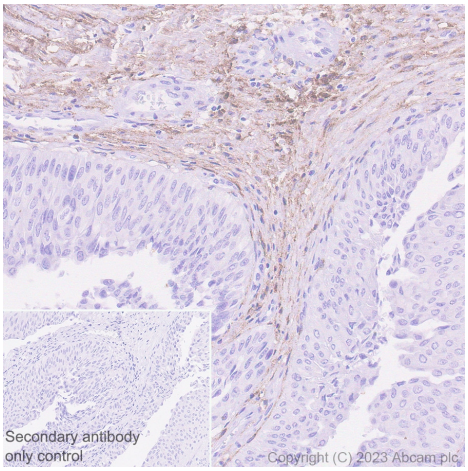
**Exposure time:** 80 seconds

This data was developed using the same antibody clone in a different buffer formulation (**ab203491**).

Blocking/Dilution buffer: 5% NFDM/TBST.

We recommend using higher sensitivity ECL to improve results.

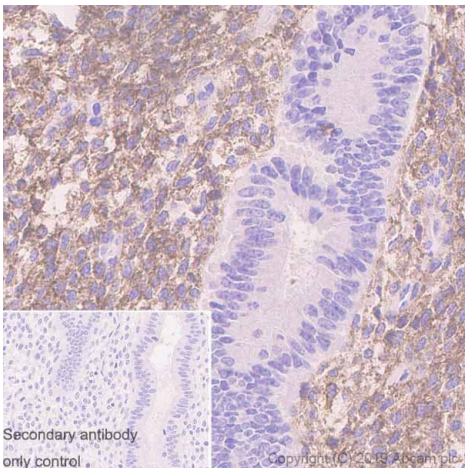
**ab134123** can be a good alternative when testing samples with low level of PDGFR alpha which detects stronger signal than **ab203491** in western blot.




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab203491**).This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab203491**).

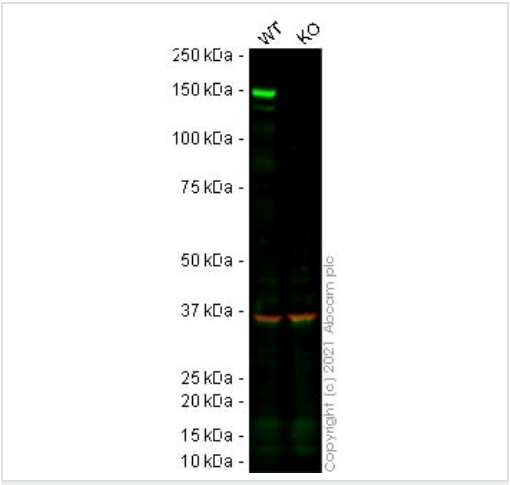
Immunohistochemical analysis of paraffin-embedded human human bladder carcinoma labeling PDGFR alpha with **ab203491** at 0.26 µg/mL followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining in human bladder carcinoma was observed. The section was incubated with **ab203491** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins was used.




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

Immunohistochemical analysis of paraffin-embedded human endometrium tissue labeling PDGFR alpha with **ab203491** at 0.26 µg/mL followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining in human endometrium was observed. The section was incubated with **ab203491** for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins was used.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab203491**).




Western blot - Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

**All lanes :** Anti-PDGFR alpha antibody [EPR22059-270] (**ab203491**) at 1/1000 dilution

**Lane 1 :** Wild-type SH-SY5Y cell lysate
**Lane 2 :** PDGFRA knockout SH-SY5Y cell lysate

Lysates/proteins at 40 µg per lane.

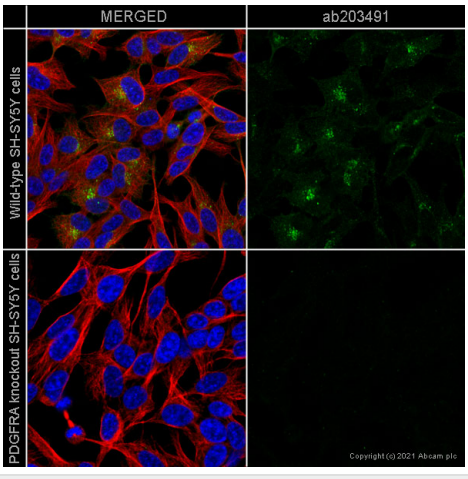
Performed under reducing conditions.

**Predicted band size:** 122 kDa
**Observed band size:** 150 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab203491**).

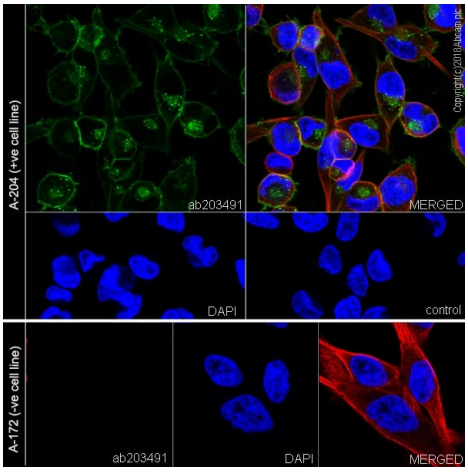
**Lanes 1 - 2:** Merged signal (red and green). Green - **ab203491** observed at 150 kDa. Red - loading control **ab8245** (Mouse anti-GAPDH antibody [6C5]) observed at 37 kDa.

**ab203491** was shown to react with PDGFR alpha in wild-type SH-SY5Y cells in Western blot with loss of signal observed in PDGFRA knockout sample. Wild-type SH-SY5Y and PDGFRA knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with **ab203491** and **ab8245** (Mouse anti-GAPDH antibody [6C5]) overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.




Immunocytochemistry/ Immunofluorescence - Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

This data was developed using the same antibody clone in a different buffer formulation (**ab203491**) (**ab275335**). **ab203491** staining PDGFR alpha in wild-type SH-SY5Y cells (top panel) and PDGFRA knockout SH-SY5Y cells (bottom panel). The cells were fixed with 100% methanol (5 min) then permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with **ab203491** at 1µg/ml concentration and **ab7291** (Mouse monoclonal to alpha Tubulin) at 1/1000 dilution overnight at 4°C followed by a further incubation at room temperature for 1h with a goat secondary antibody to rabbit IgG (Alexa Fluor® 488) (**ab150081**) at 2 µg/ml (shown in green) and a goat secondary antibody to mouse IgG (Alexa Fluor® 594) (**ab150120**) at 2 µg/ml (shown in red). Nuclear DNA was labelled in blue with DAPI.
Image was taken with a confocal microscope (Leica-Microsystems TCS SP8).




Immunocytochemistry/ Immunofluorescence - Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized A-204 (human muscle rhabdomyosarcoma cell line) cells and A-172 (human brain glioblastoma cell line) labeling PDGFR alpha with **ab203491** at 1/500 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

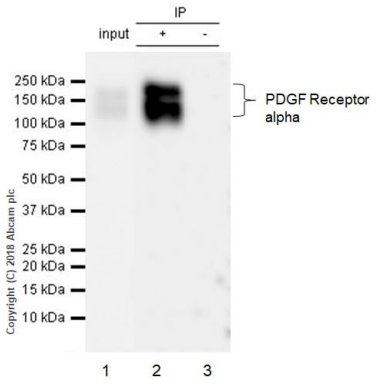
Confocal image showing membranous and cytoplasmic staining in A-204 cell line.

**Negative control**: A-172 (PMID:8425771.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab203491**).




Immunoprecipitation - Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

PDGFR alpha was immunoprecipitated from 0.35 mg of A-204 (human muscle rhabdomyosarcoma cell line) whole cell lysate with **ab203491** at 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab203491** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1000 dilution.

Lane 1: A-204 whole cell lysate 10 µg (Input).

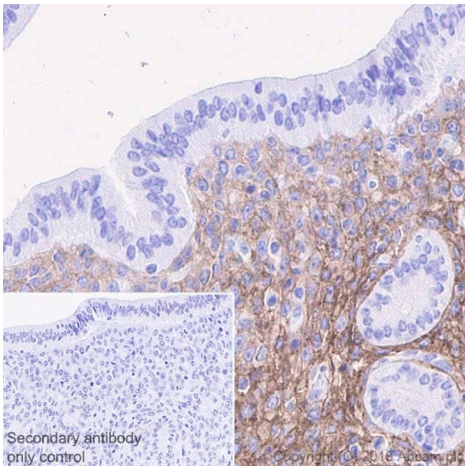
Lane 2: **ab203491** IP in A-204 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab203491** in A-204 whole cell lysate.

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

Exposure time: 50 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab203491**).



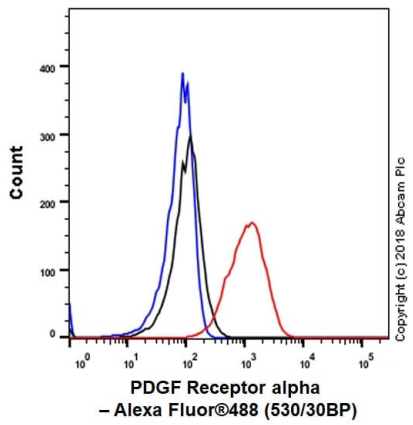

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

Immunohistochemical analysis of paraffin-embedded mouse uterus tissue labeling PDGFR alpha with **ab203491** at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining on interstitial cells of mouse uterus (PMID: 25788664). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab203491**).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

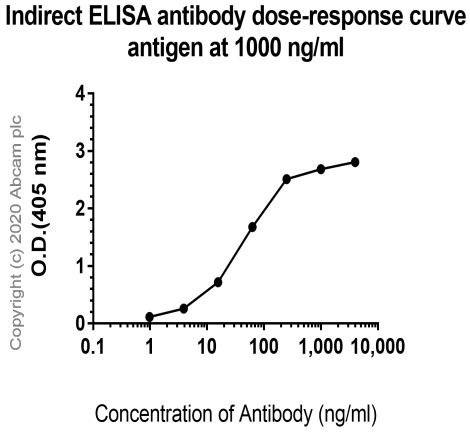



Flow Cytometry - Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

Flow cytometric analysis of NIH/3T3 (mouse embyro fibroblast cell line) cell line labeling PDGFR alpha with **ab203491** at 1/500 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/2000 dilution was used as the secondary antibody.

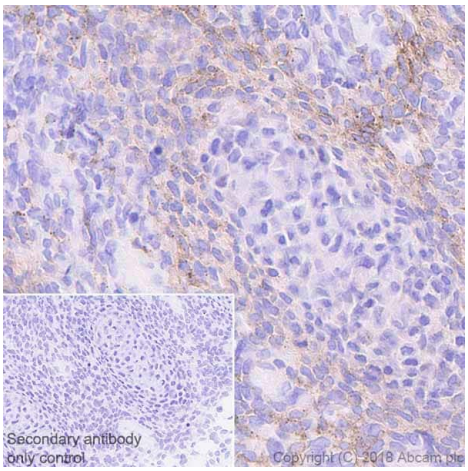
Gated on viable cells.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab203491**).




Indirect ELISA - Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

indirect ELISA using **ab203491** at varying antibody concentrations (4000~0 ng /ml) and Human PDGF Receptor alpha antigen at 1000 ng/ml. Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/2500 dilution dilution was used as a secondary antibody.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab203491**).



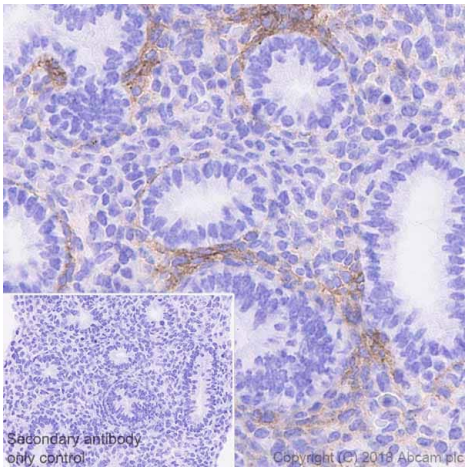

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

Immunohistochemical analysis of paraffin-embedded rat E14.5 intervertebral disc tissue labeling PDGFR alpha with **ab203491** at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining in mesenchymal cells of rat E14.5 intervertebral disc (PMID: 9199674). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab203491**).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



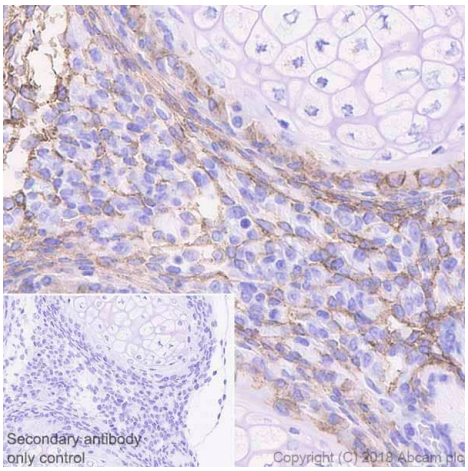

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

Immunohistochemical analysis of paraffin-embedded mouse E14.5 lung tissue labeling PDGFR alpha with **ab203491** at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining in the mesenchyme of mouse E14.5 lung (PMID: 8681381). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab203491**).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



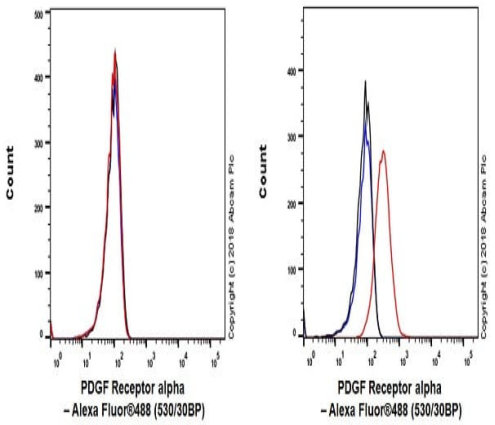

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

Immunohistochemical analysis of paraffin-embedded mouse E14.5 intervertebral disc tissue labeling PDGFR alpha with **ab203491** at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining in mesenchymal cells of mouse E14.5 intervertebral disc (PMID: 9199674). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab203491**).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

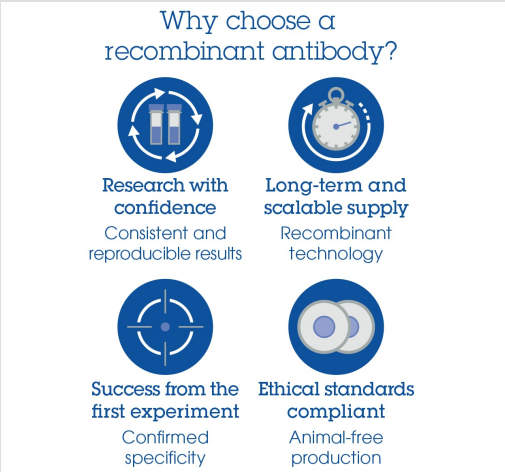



Flow Cytometry - Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

Flow cytometric analysis of A-172 (human brain glioblastoma cell line, left) and A-204 (human muscle rhabdomyosarcoma cell line, right) cell lines labeling PDGFR alpha with **ab203491** at 1/50 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab203491**).




Anti-PDGFR alpha antibody [EPR22059-270] - BSA and Azide free (ab234965)

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

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