abcam

ab203491

Anti-PDGFR alpha antibody [EPR22059-270]

Anti-PDGFR alpha antibody [EPR22059-270] (ab203491) is a rabbit monoclonal antibody detecting PDGFR alpha in **Western Blot, Flow Cytometry, IP, IHC-P, IHC-Fr, ICC/IF, ELISA**. Suitable for **Human, Mouse, Rat**.

- KO validated for confirmed specificity
- Biophysical QC for unrivalled batch-batch consistency
- Over 30 publications

Recombinant | RabMAb | KO Validated | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR22059-270
Purification technique	Affinity purification Protein A
Specificity	PDGFR alpha is membrane protein, so enrichment of membrane could help increasing the detection level of PDGFR alpha.
Concentration	0.553 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Species	Human
Dilution info	1/50
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

I-ELISA

Tested

Species	Recombinant fragment - Human
Dilution info	1 µg/mL
Notes	-

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/500
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

IHC-Fr

Tested

Species	Human
Dilution info	1/500
Notes	-

Expected

Species	Mouse, Rat

Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Rat
Dilution info	0.26 µg/mL
Notes	This antibody is better suited for Leica Biosystems BOND® RX instrument. For manual detection, please use the Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Human
Dilution info	0.26 µg/mL
Notes	This antibody is better suited for Leica Biosystems BOND® RX instrument. For manual detection, please use the Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	1/500
Notes	This antibody is better suited for Leica Biosystems BOND® RX instrument. For manual detection, please use the Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Recombinant fragment - Human

Dilution info	-
Notes	-

Target data

See full target information PDGFRA

Function	Tyrosine-protein kinase that acts as a cell-surface receptor for PDGFA, PDGFB and PDGFC and plays an essential role in the regulation of embryonic development, cell proliferation, survival and chemotaxis. Depending on the context, promotes or inhibits cell proliferation and cell migration. Plays an important role in the differentiation of bone marrow-derived mesenchymal stem cells. Required for normal skeleton development and cephalic closure during embryonic development. Required for normal development of the mucosa lining the gastrointestinal tract, and for recruitment of mesenchymal cells and normal development of intestinal villi. Plays a role in cell migration and chemotaxis in wound healing. Plays a role in platelet activation, secretion of agonists from platelet granules, and in thrombin-induced platelet aggregation. Binding of its cognate ligands - homodimeric PDGFA, homodimeric PDGFB, heterodimers formed by PDGFA and PDGFB or homodimeric PDGFC -leads to the activation of several signaling cascades; the response depends on the nature of the bound ligand and is modulated by the formation of heterodimers between PDGFRA and PDGFRB. Phosphorylates PIK3R1, PLCG1, and PTPN11. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate, mobilization of cytosolic Ca(2+) and the activation of protein kinase C. Phosphorylates PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, and thereby mediates activation of the AKT1 signaling pathway. Mediates activation of HRAS and of the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1. Promotes activation of STAT family members STAT1, STAT3 and STAT5A and/or STAT5B. Receptor signaling is down-regulated by protein phosphatases that dephosphorylate the receptor and its down-stream effectors, and by rapid internalization of the activated receptor.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot

Storage information	Avoid freeze / thaw cycle

Notes

Anti-PDGFR alpha antibody [EPR22059-270] (ab203491) was developed by Abcam using patented rabbit monoclonal antibody technology and is validated for use in Flow Cyt, I-ELISA, ICC/IF, IHC-Fr, IHC-P and IP.

Abcam's high quality manufacturing and validation processes ensure Anti-PDGFR alpha antibody [EPR22059-270] (ab203491) has high sensitivity and specificity alongside high lot-to-lot consistency and reproducibility.

The specificity of Anti-PDGFR alpha antibody [EPR22059-270] (ab203491) has been confirmed by Western Blot testing in PDGFR alpha knockout SH-SY5Y cells (ab275335).

Anti-PDGFR alpha antibody [EPR22059-270] (ab203491) has 4 independent reviews from customers.

Anti-PDGFR alpha antibody [EPR22059-270] (ab203491) specifically detects PDGFR alpha (UniProt ID: P16234; Molecular weight: 121kDa) and is sold in a convenient trial size to enable initial testing (20 µL) and larger sizes for subsequent scaling up experiments (100 µL and 1 mL).

Conjugation-ready, carrier free format available for antibody clone EPR22059-270 - ab234965.

Antibody clone EPR22059-270 is also available pre-conjugated to a variety of labels for your convenience - Alexa Fluor® 647, PE, Alexa Fluor® 488 (ab270085, ab270086, ab307855).

The platelet-derived growth factor receptor alpha (PDGFRA) is a cell surface tyrosine kinase receptor that plays a significant role in tumor growth, invasion and angiogenesis in oncology often serving as a therapeutic target due to its overexpression in various cancers, particularly in gastrointestinal stromal tumors (GISTs),

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

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	PDGFR alpha also known as platelet-derived growth factor receptor alpha is a cell surface receptor tyrosine kinase with a mass of approximately 123 kDa. It plays a mechanical role in transmitting signals across the cell membrane initiating cellular

	responses. PDGFR alpha is widely expressed in mesenchymal cells including fibroblasts and smooth muscle cells. Researchers frequently employ techniques such as PDGFRA IHC and PDGFRA staining to study the localization and expression levels in tissues.
Biological function summary	PDGFR alpha mediates cell proliferation survival and differentiation especially in embryonic development and wound healing. The receptor often forms a complex by dimerizing with itself or with PDGFR beta to activate intracellular signaling cascades. This process is initiated upon ligand binding which triggers autophosphorylation on tyrosine residues. The receptor is also recognized in the detection of PDGFRA with assays such as PDGFRA ELISA.
Pathways	PDGFR alpha significantly affects the MAPK and PI3K/AKT signaling pathways which regulate cellular growth and survival signals. Through these pathways PDGFR alpha interacts with related proteins like SHP-2 and PI3K contributing to signal transduction involved in cellular responses. This role links PDGFR alpha to important cellular processes via its kinase activity and signal integration.
Associated diseases and disorders	PDGFR alpha is implicated in conditions such as gastrointestinal stromal tumors (GISTs) and idiopathic pulmonary fibrosis (IPF). It connects to proteins such as KIT in GISTs where mutations cause aberrant receptor signaling leading to tumorigenesis. Aberrant PDGFR alpha signaling also associates with IPF a disorder characterized by increased fibroblast proliferation and fibrotic tissue formation. These connections make PDGFR alpha a significant target for research and therapeutic intervention.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

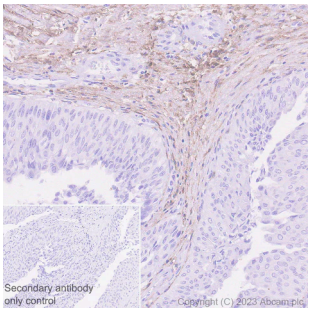
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

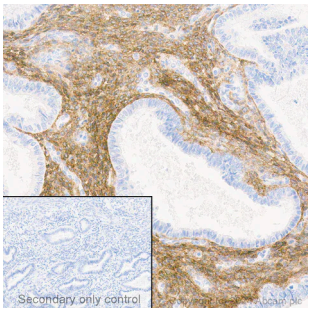
24 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

PDGFR alpha Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of human bladder carcinoma using rabbit Anti-PDGFR alpha antibody

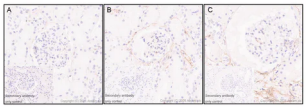
Immunohistochemical analysis of paraffin-embedded human bladder carcinoma labeling PDGFR alpha with ab203491 at 0.26 µg/mL followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining in human bladder carcinoma was observed. The section was incubated with 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] (ab203491)

Immunohistochemical analysis of formalin fixed paraffin embedded human endometrium labelling PDGFR alpha with ab203491 at a concentration of 0.1µg/ml. The immunostaining was performed on a Ventana DISCOVERY ULTRA (Roche Tissue Diagnostics) instrument with a OptiView DAB IHC Detection Kit. Heat mediated antigen retrieval was performed with DISCOVERY cell conditioning solution (CC1) 100°C, pH8.5 for 32mins. ab203491 anti-PDGFR alpha antibody [EPR22059-270] was incubated for 16mins at 37°C. Sections were counterstained with Hematoxylin II. Image inset shows absence of staining in secondary antibody only control.

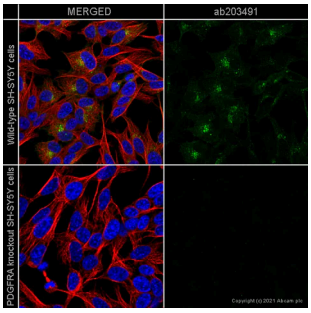
Customers are encouraged to optimise antigen retrieval conditions, antibody concentration, incubation times and temperature for best results in their own IHC assay workflow (automated and manual).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

PDGFR alpha Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human kidney tissue using rabbit Anti-PDGFR alpha antibody

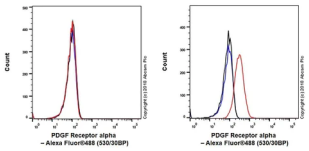
Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling PDGFR alpha with ab203491 A, B. at 1/100 dilution (5.81µg/ml) overnight at 4 °C, and C, at 1/2000 dilution (0.29 µg/ml) for 30 mins at room temperature. A, Goat Anti-Rabbit IgG H&L (HRP polymer) (ab214880) used as secondary (ready to use), B, C. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) used as secondary (ready to use). Counterstained using Hematoxylin. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Positive staining on human kidney. A, B: Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). C: Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) for 20 mins. This antibody is better suited for Leica Biosystems BOND® RX instrument. For manual detection, please use the Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).



Immunocytochemistry/ Immunofluorescence - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

PDGFR alpha Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PDGFR alpha antibody

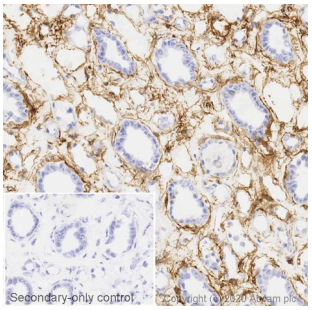
ab203491 staining PDGFR alpha in wild-type SH-SY5Y cells (top panel) and PDGFRA knockout SH-SY5Y cells (ab275335) (bottom panel). The cells were fixed with 100% methanol (5 min) then permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 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).



Flow Cytometry - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

PDGFR alpha Flow Cytometry staining using rabbit Anti-PDGFR alpha antibody

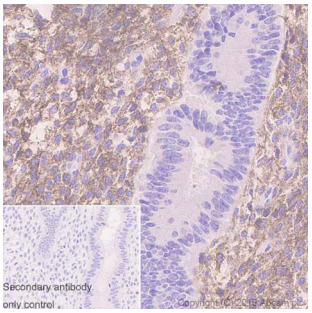
Flow cytometric analysis of A-172 (human brain glioblastoma cell line, left) and A-204 (human muscle rhabdomyosarcoma cell line, right) cell lines labeling PDGFR alpha with ab203491 at 1/50 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabeled 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.



Immunohistochemistry (Frozen sections) - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

PDGFR alpha Immunohistochemistry (Frozen sections) staining using rabbit Anti-PDGFR alpha antibody

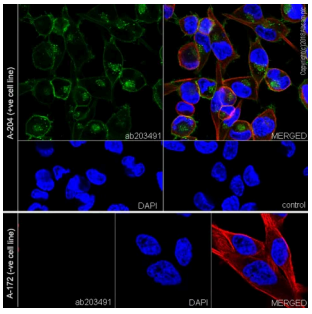
IHC image of PDGFR alpha staining in a section of frozen normal human kidney performed on a Leica BOND system using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with ab203491, 1/500 dilution, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

PDGFR alpha Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human endometrium tissue using rabbit Anti-PDGFR alpha antibody

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.



Immunocytochemistry/ Immunofluorescence - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

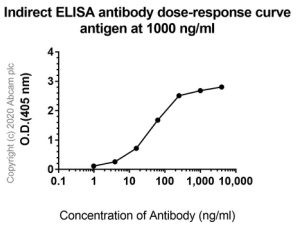
PDGFR alpha Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PDGFR alpha antibody

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.

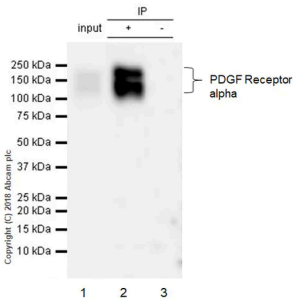
The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) (red) at 1/200 dilution.

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.



Indirect ELISA - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

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.



Immunoprecipitation - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

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.

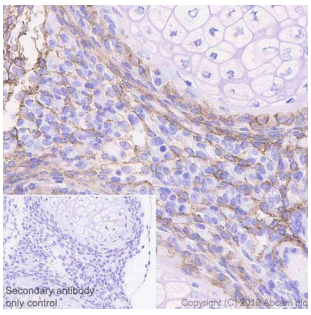
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 50 seconds.

All lanes:
Immunoprecipitation - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

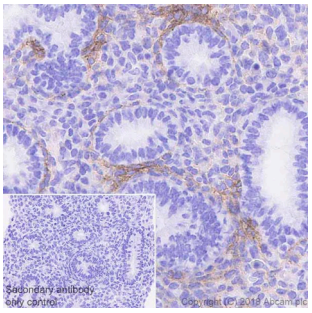
Predicted band size: 122 kDa

Observed band size: 150 kDa, 180 kDa



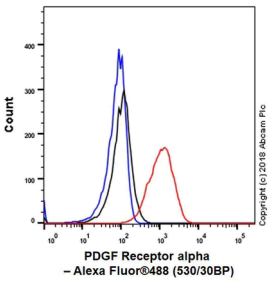
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

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. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

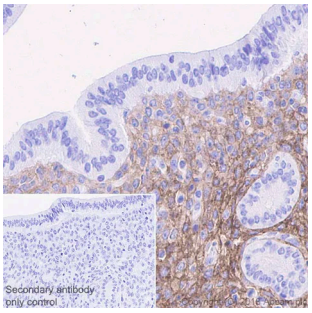
Immunohistochemical analysis of paraffin-embedded mouse E14.5 lung tissue labeling PDGFR alpha with ab203491 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining in the mesenchyme of mouse E14.5 lung (PMID: 8681381). Counter stained with hematoxylin. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.



Flow Cytometry - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

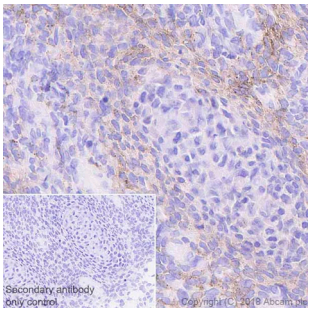
PDGFR alpha Flow Cytometry staining using rabbit Anti-PDGFR alpha antibody

Flow cytometric analysis of NIH/3T3 (mouse embryo 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.



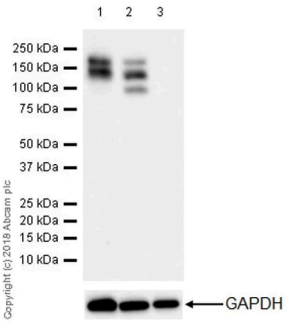
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

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. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

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. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.



Western blot - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

PDGFR alpha Western blot staining using rabbit Anti-PDGFR alpha antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491) at 1/1000 dilution

Lane 1:
A-204 (Human muscle rhabdomyosarcoma cell line) whole cell lysate at 20 µg

Lane 2:
MG-63 (human osteosarcoma fibroblast cell line) whole cell lysate at 20 µg

Lane 3:
A-172 (human brain glioblastoma cell line) whole cell lysate at 20 µg

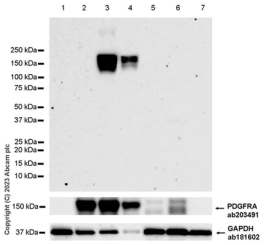
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 122 kDa

Observed band size: 150 kDa, 180 kDa

Exposure time: 92s



Western blot - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

PDGFR alpha Western blot staining using rabbit Anti-PDGFR alpha antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST This antibody recognizes human PDGFR (D842V) but not human wild-type PDGFRA. In western blot, anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution and anti-PDGFRA antibody (ab203491) staining at 1/1000 dilution. A-172 cells are negative for wild-type PDGFRA (PMID:8425771).
All lanes:
Western blot - Anti-PDGFR alpha (mutated D842V) antibody [EPR26304-280] (ab313771) at 1/1000 dilution

Lane 1:
293T cells transfected with an empty vector containing a His-tag, whole cell lysate at 20 µg

Lane 2:
293T cells transfected with a human wild-type PDGFRA expression vector containing a His-tag, whole cell lysate at 2 µg

Lane 3:
293T cells transfected with a human PDGFRA (D842V) expression vector containing a His-tag, whole cell lysate at 2 µg

Lane 4:
293T cells transfected with a human PDGFRA (D842V) expression vector containing a His-tag, whole cell lysate at 0.4 µg

Lane 5:
MG-63 (human osteosarcoma fibroblast) whole cell lysate at 20 µg

Lane 6:
A-204 (human muscle rhabdomyosarcoma cell) whole cell lysate at 20 µg

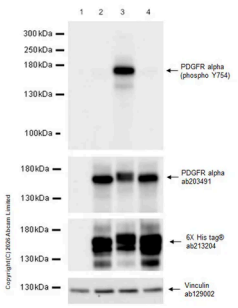
Lane 7:
A-172 (human brain glioblastoma) whole cell lysate at 20 µg

Secondary

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

Observed band size: 160 kDa

Exposure time: 180s



Western blot - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

PDGFR alpha Western blot staining using rabbit Anti-PDGFR alpha antibody

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

In Western blot, Anti-6X His tag® antibody [EPR20547] - ChIP Grade (ab213204) (1:5000) (50kDa);
Anti-Vinculin antibody [EPR8185] (ab129002) (1:10000) (124KDa);
Anti-PDGFR alpha antibody [EPR22059-270] - (ab203491) (1:1000) (160KDa).

All lanes:
Western blot - Anti-PDGFR alpha (phospho Y754) antibody [EPR31185-28] (ab327840) at 1/1000 dilution

Lane 1:
293T (human embryonic kidney epithelial cell) cells transfected with an empty vector containing a myc-His-tag® whole cell lysate at 5 µg

Lane 2:
293T cells transfected with a human PDGFR alpha (WT) expression vector containing a myc-His-tag® whole cell lysate at 5 µg

Lane 3:
293T cells transfected with a human PDGFR alpha (WT) expression vector containing a myc-His-tag®, and then treated with 1mM pervanadate for 30min whole cell lysate at 5 µg

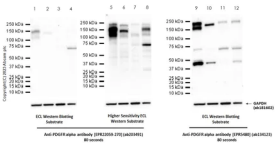
Lane 4:
293T cells transfected with a human PDGFR alpha (Y754A mutant) expression vector containing a myc-His-tag®, and then treated with 1mM pervanadate for 30min whole cell lysate at 5 µg

Secondary

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

Observed band size: 160 kDa, 124 kDa

Exposure time: 3s



Western blot - Anti-PDGFR alpha antibody [EPR22059-270] (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.
Lanes 1 - 8:
Western blot - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491) at 1/1000 dilution

Lanes 9 - 12:
Western blot - Anti-PDGFR alpha antibody [EPR5480] (ab134123) at 1/1000 dilution

Lanes 1, 5 and 9:
SH-SY5Y

Lanes 2, 6 and 10:
Human brain tissue lysate at 20 µg

Lanes 3, 7 and 11:
Human heart tissue lysate at 20 µg

Lanes 4, 8 and 12:
Human lung tissue lysate at 20 µg

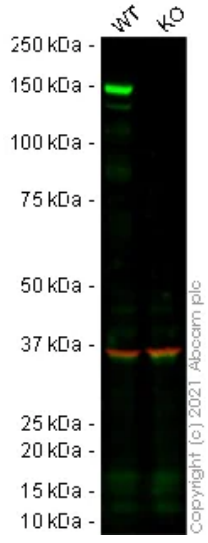
Secondary

All lanes:
Western blot at 1/2000 dilution

Predicted band size: 122 kDa

Observed band size: 150 kDa

Exposure time: 80s



Western blot - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

PDGFR alpha Western blot staining using rabbit Anti-PDGFR alpha antibody

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 cell line ab275335 (knockout cell lysate ab275522). 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.

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

Lane 1:
Wild-type SH-SY5Y cell lysate at 40 µg

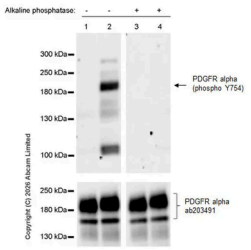
Lane 2:
PDGFRA knockout SH-SY5Y cell lysate at 40 µg

Lane 2:
Western blot - Human PDGFRA knockout SH-SY5Y cell line (ab275335)

Performed under reducing conditions.

Predicted band size: 122 kDa

Observed band size: 150 kDa



Western blot - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

PDGFR alpha Western blot staining of A-204 treated with 50uM pervanadate for 30min whole cell lysate (untreated membrane) using rabbit Anti-PDGFR alpha antibody

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

The identity of the band at around 100 kDa is unknown.

All lanes:
Western blot - Anti-PDGFR alpha (phospho Y754) antibody [EPR31185-28] (ab327840) at 1/1000 dilution

Lane 1:
Untreated A-204 (human muscle rhabdomyosarcoma cell) whole cell lysate (untreated membrane) at 50 µg

Lane 2:
A-204 treated with 50uM pervanadate for 30min whole cell lysate (untreated membrane) at 50 µg

Lane 3:
Untreated A-204 (human muscle rhabdomyosarcoma cell) whole cell lysate (alkaline phosphatase treated membrane) at 50 µg

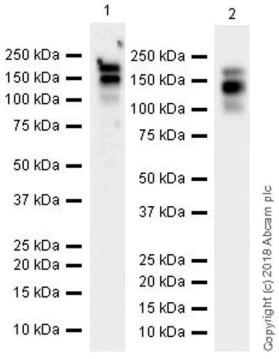
Lane 4:
A-204 treated with 50uM pervanadate for 30min whole cell lysate (alkaline phosphatase treated membrane) at 50 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 190 kDa, 160 kDa

Exposure time: 70s



Western blot - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

Blocking/Dilution buffer: 5% NFDM/TBST.
Exposure time : Lane 1: 3 minutes; Lane 2: 59 seconds.

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

Lane 1:
C6 (rat glial tumor cell line) whole cell lysate at 10 µg

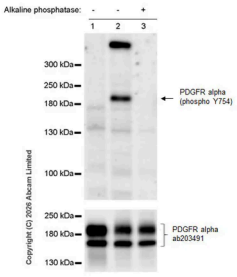
Lane 2:
NIH/3T3 (mouse embyro fibroblast cell line) whole cell lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 122 kDa

Observed band size: 150 kDa, 180 kDa



Western blot - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491)

PDGFR alpha Western blot staining of NIH/3T3 was starved for 24 hours, and then treated with 100 ng/mL PDGF-AA for 20 minutes, whole cell lysate (untreated membrane) using rabbit Anti-PDGFR alpha antibody

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

The identity of the higher MW band above 300 kDa is unknown.

All lanes:
Western blot - Anti-PDGFR alpha (phospho Y754) antibody [EPR31185-28] (ab327840) at 1/1000 dilution

Lane 1:
NIH/3T3 (mouse embryonic fibroblast) was starved for 24 hours, whole cell lysate (untreated membrane) at 30 µg

Lane 2:
NIH/3T3 was starved for 24 hours, and then treated with 100 ng/mL PDGF-AA for 20 minutes, whole cell lysate (untreated membrane) at 30 µg

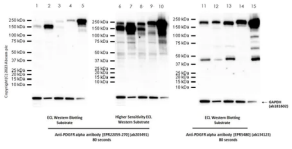
Lane 3:
NIH/3T3 was starved for 24 hours, and then treated with 100 ng/mL PDGF-AA for 20 minutes, whole cell lysate (alkaline phosphatase treated membrane) at 30 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 190 kDa, 160 kDa

Exposure time: 180s



Western blot - Anti-PDGFR alpha antibody [EPR22059-270] (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.
Lanes 1 - 10:
Western blot - Anti-PDGFR alpha antibody [EPR22059-270] (ab203491) at 1/1000 dilution

Lanes 11 - 15:
Western blot - Anti-PDGFR alpha antibody [EPR5480] (ab134123) at 1/1000 dilution

Lanes 1, 6 and 11:
Rat heart tissue lysate at 20 µg

Lanes 2, 7 and 12:
Rat lung tissue lysate at 20 µg

Lanes 3, 8 and 13:
Mouse brain tissue lysate at 20 µg

Lanes 4, 9 and 14:
Mouse heart tissue lysate at 20 µg

Lanes 5, 10 and 15:
Mouse 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: 80s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.