

## Product datasheet

# Anti-PDGFR beta (phospho Y751) antibody [EPR21744] ab218534

Recombinant RabMAb

[3 References](#) [3 Images](#)

### Overview

<b>Product name</b>	Anti-PDGFR beta (phospho Y751) antibody [EPR21744]
<b>Description</b>	Rabbit monoclonal [EPR21744] to PDGFR beta (phospho Y751)
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Dot blot, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: IMR-90 (treated with 50 ng/ml PDGF-BB for 5 minutes), NIH/3T3 (treated with 50 ng/ml PDGF-BB for 5 minutes) and C6 (treated with 50 ng/ml PDGF-BB for 5 minutes) whole cell lysates.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

Clone number	EPR21744
Isotype	IgG

## Applications

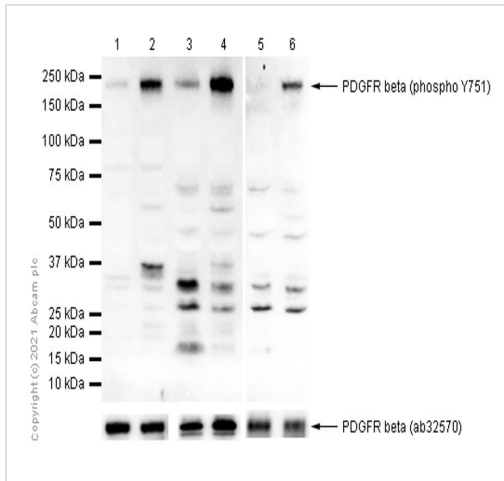
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab218534 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Dot blot		1/1000.
WB		1/1000. Detects a band of approximately 190 kDa (predicted molecular weight: 124 kDa).

## Target

<b>Function</b>	Receptor that binds specifically to PDGFB and PDGFD and has a tyrosine-protein kinase activity. Phosphorylates Tyr residues at the C-terminus of PTPN11 creating a binding site for the SH2 domain of GRB2.
<b>Involvement in disease</b>	<p>Note=A chromosomal aberration involving PDGFRB is found in a form of chronic myelomonocytic leukemia (CMML). Translocation t(5;12)(q33;p13) with EVT6/TEL. It is characterized by abnormal clonal myeloid proliferation and by progression to acute myelogenous leukemia (AML).</p> <p>Note=A chromosomal aberration involving PDGFRB may be a cause of acute myelogenous leukemia. Translocation t(5;14)(q33;q32) with TRIP11. The fusion protein may be involved in clonal evolution of leukemia and eosinophilia.</p> <p>Note=A chromosomal aberration involving PDGFRB may be a cause of juvenile myelomonocytic leukemia. Translocation t(5;17)(q33;p11.2) with SPECC1.</p> <p>Defects in PDGFRB are a cause of myeloproliferative disorder chronic with eosinophilia (MPE) [MIM:131440]. A hematologic disorder characterized by malignant eosinophils proliferation.</p> <p>Note=A chromosomal aberration involving PDGFRB is found in many instances of myeloproliferative disorder chronic with eosinophilia. Translocation t(5;12) with ETV6 on chromosome 12 creating an PDGFRB-ETV6 fusion protein.</p> <p>Note=A chromosomal aberration involving PDGFRB may be the cause of a myeloproliferative disorder (MBD) associated with eosinophilia. Translocation t(1;5)(q23;q33) that forms a PDE4DIP-PDGFRB fusion protein.</p>
<b>Sequence similarities</b>	<p>Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily.</p> <p>Contains 5 Ig-like C2-type (immunoglobulin-like) domains.</p> <p>Contains 1 protein kinase domain.</p>
<b>Post-translational modifications</b>	Autophosphorylated. Dephosphorylated by PTPRJ at Tyr-751, Tyr-857, Tyr-1009 and Tyr-1021.
<b>Cellular localization</b>	Membrane.

## Images



Western blot - Anti-PDGFR beta (phospho Y751)  
antibody [EPR21744] (ab218534)

**All lanes :** Anti-PDGFR beta (phospho Y751) antibody  
[EPR21744] (ab218534) at 1/1000 dilution

**Lane 1 :** Untreated IMR-90 (human lung fibroblast cell line) whole  
cell lysate

**Lane 2 :** IMR-90 treated with 50 ng/ml PDGF-BB for 5 minutes  
whole cell lysate

**Lane 3 :** Untreated NIH/3T3 (mouse embryo fibroblast cell line)  
whole cell lysate

**Lane 4 :** NIH/3T3 treated with 50 ng/ml PDGF-BB for 5 minutes  
whole cell lysate

**Lane 5 :** Untreated C6 (rat glial tumor glial cell line) whole cell  
lysate

**Lane 6 :** C6 treated with 100 ng/ml PDGF-BB for 60 minutes whole  
cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

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

**Predicted band size:** 124 kDa

**Observed band size:** 190 kDa

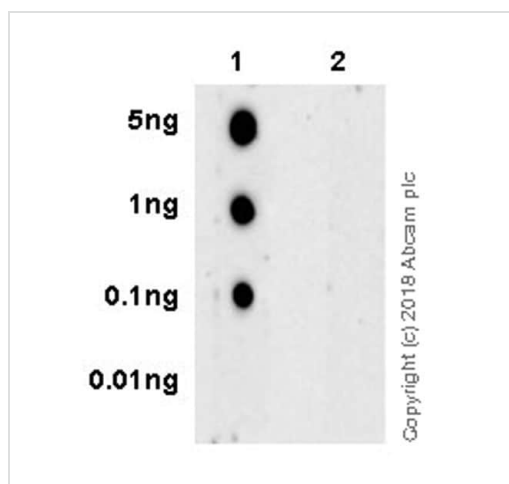
Expression of PDGFR beta (phospho Y751) is induced by PDGF-  
BB. The antibody recognizes both the glycosylated and  
unglycosylated protein (PMID: 9307305).

Exposure:

Lane 1 - 4: 80 seconds

Lane 5 - 6: 180 seconds

Blocking and diluting buffer: 5% NFDM/TBST



Dot Blot - Anti-PDGFR beta (phospho Y751)  
antibody [EPR21744] (ab218534)

Dot blot analysis of PDGFR beta (phospho Y751) labeled with ab218534 at 1/1000 dilution.

**Lane 1:** Human PDGFR beta (phospho Y751) peptide.

**Lane 2:** Human PDGFR beta non-phospho peptide.

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution was used as secondary antibody.

Blocking and dilution buffer: 5% NFDm/TBST.

Exposure time: 3 minutes.

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-PDGFR beta (phospho Y751) antibody  
[EPR21744] (ab218534)

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