

## Product datasheet

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

Recombinant RabMAb

2 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 within Human PDGFR beta aa 700-800 (phospho Y751). The exact sequence is proprietary. Database link: <a href="#">P09619</a>
<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>	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> .  This product is a <a href="#">recombinant rabbit monoclonal antibody</a> .

### 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>	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR21744
<b>Isotype</b>	IgG

## Applications

Our [Abpromise guarantee](#) covers the use of **ab218534** in the following tested applications.

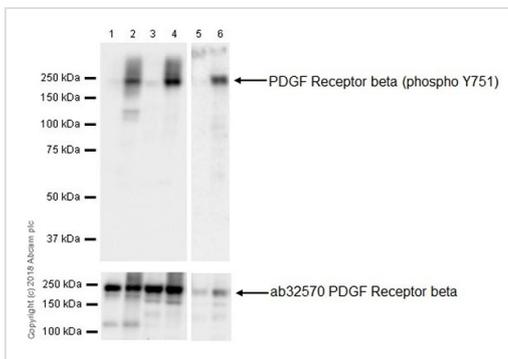
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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 50 ng/ml PDGF-BB for 5 minutes) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

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

**Predicted band size:** 124 kDa

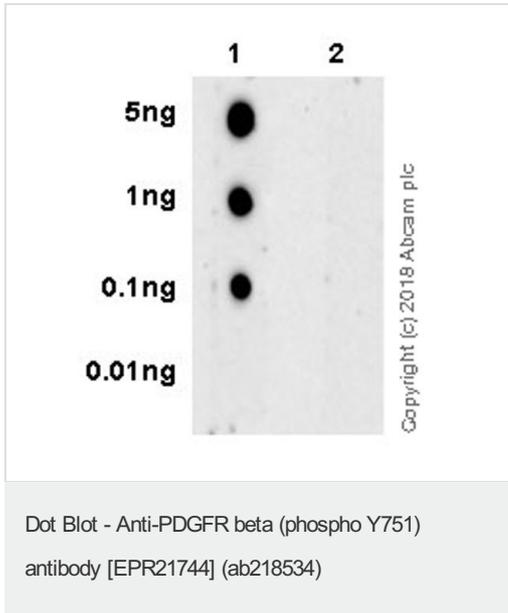
**Observed band size:** 124,190 kDa

[why is the actual band size different from the predicted?](#)

**Exposure times :** Lanes 1-4: 26 seconds, Lanes 5 & 6: 3 minutes.

Blocking and dilution buffer: 5% NFDm/TBST.

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



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

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

**Lane 2:** 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% NFD/MTBST.

Exposure time: 3 minutes.

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

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors