abcam

Product datasheet

Anti-PDGFR beta (phospho Y1021) antibody [EPR2476] ab134048



★☆☆☆ 1 Abreviews 5 Images

Overview

Product name Anti-PDGFR beta (phospho Y1021) antibody [EPR2476]

Description Rabbit monoclonal [EPR2476] to PDGFR beta (phospho Y1021)

Host species Rabbit

Tested applications Suitable for: WB, Flow Cyt (Intra), Dot blot

Unsuitable for: ICC/IF or IHC-P

Species reactivity Reacts with: Mouse

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control NIH/3T3 lysates treated with Pervanadate

General notes 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 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**.

Human, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.2

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

Purity Tissue culture supernatant

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Clonality Monoclonal
Clone number EPR2476
Isotype IqG

Applications

The Abpromise guarantee

Our Abpromise quarantee covers the use of ab134048 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
WB	★ ★ ★ ★ ★ (1)	1/50000 - 1/200000. Predicted molecular weight: 190 kDa.
Flow Cyt (Intra)		1/10 - 1/100. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
Dot blot		1/1000.

Application notes

Is unsuitable for ICC/IF or IHC-P.

Target

Function

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.

Involvement in disease

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). 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.

Note=A chromosomal aberration involving PDGFRB may be a cause of juvenile myelomonocytic leukemia. Translocation t(5;17)(q33;p11.2) with SPECC1.

Defects in PDGFRB are a cause of myeloproliferative disorder chronic with eosinophilia (MPE) [MIM:131440]. A hematologic disorder characterized by malignant eosinophils proliferation. 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.

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.

Sequence similarities

Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily.

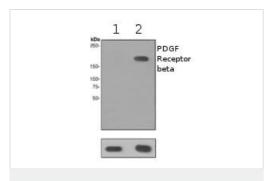
Contains 5 lg-like C2-type (immunoglobulin-like) domains.

Contains 1 protein kinase domain.

Post-translational modifications

Autophosphorylated. Dephosphorylated by PTPRJ at Tyr-751, Tyr-857, Tyr-1009 and Tyr-1021.

Images



Western blot - Anti-PDGFR beta (phospho Y1021) antibody [EPR2476] (ab134048)

All lanes : Anti-PDGFR beta (phospho Y1021) antibody [EPR2476] (ab134048) at 1/50000 dilution

Lane 1: NIH/3T3 untreated

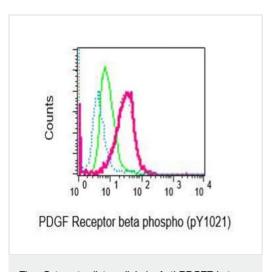
Lane 2: NIH/3T3 treated with Pervanadate

Lysates/proteins at 10 µg per lane.

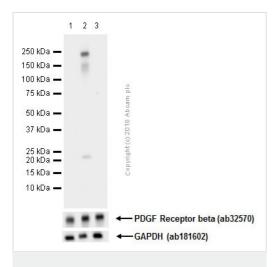
Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 190 kDa



Flow Cytometry (Intracellular) - Anti-PDGFR beta (phospho Y1021) antibody [EPR2476] (ab134048) Intracellular Intracellular Flow Cytoremtic analysis of permeabilized NIH/3T3 cells, untreated (green) or pervanadate-treated (red) using anti-PDGF Receptor beta phospho RabMab and pervanadate-treated NIH/3T3 cells using the same antibody preincubated with phospho-PDGF Receptor beta peptide (blue) or non-phospho-PDGF Receptor beta peptide (orange)



Western blot - Anti-PDGFR beta (phospho Y1021) antibody [EPR2476] (ab134048)

All lanes: Anti-PDGFR beta (phospho Y1021) antibody [EPR2476] (ab134048) at 1/5000 dilution (Purified)

Lane 1 : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

Lane 2: NIH/3T3 treated with 1mM pervanadate for 30 minutes whole cell lysate

Lane 3: NIH/3T3 treated with 1mM pervanadate for 30 minutes whole cell lysate. Then the membrane was incubated with alkaline phosphatase

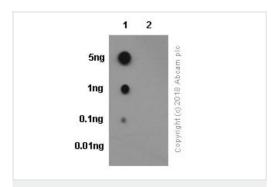
Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 190 kDa

Blocking/Diluting Buffer and concentration 5% NFDM/TBST

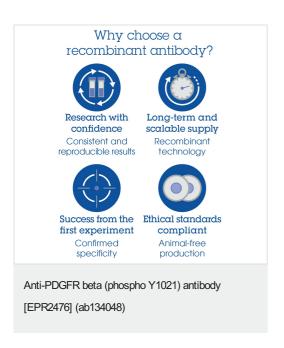


Dot Blot - Anti-PDGFR beta (phospho Y1021) antibody [EPR2476] (ab134048)

Dot blot analysis of PDGFR beta (phospho Y1021) phospho peptide (Lane 1) and PDGFR beta non-phospho peptide (Lane 2) labeling PDGFR beta (phospho Y1021) phospho peptide with ab134048 at a dilution of 1/1000 dilution (0.54ug/ml). A Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (ab97051) was used as the secondary antibody at a dilution of 1/20,000 dilution.

Blocking buffer: 5% NFDM/TBST. Dilution buffer: 5% NFDM /TBST

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