Datasheet for ABIN1177129

anti-PDGFRB antibody (pTyr1021) (Alexa Fluor 488)

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Overview

Quantity:	50 tests
Target:	PDGFRB
Binding Specificity:	pTyr1021
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This PDGFRB antibody is conjugated to Alexa Fluor 488
Application:	Intracellular Staining (ICS)

Product Details

Brand:	BD Phosflow™
Immunogen:	Phosphorylated Human PDGFRbeta (pY1021)
Clone:	J105-412
Isotype:	IgG1 kappa
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	PDGFRB
Abstract:	PDGFRB Products

Target Details

Background:	Platelet-derived growth factor (PDGF) is a potent mitogen for cells of mesenchymal origin and exerts its effects by binding to the PDGF receptor (PDGFR), a transmembrane protein tyrosine kinase. PDGFR is composed of PDGFRalpha (CD140a) and/or PDGFRbeta (CD140b) polypeptides. Both PDGF and PDGFR consist of subunits that form homo- or heterodimers with varying specificities: PDGF-AA binds only to alphaalpha PDGFR, PDGF-AB binds to both alphaalpha and alphabeta PDGFR, and PDGF-BB binds to all three PDGFRs. Ligand binding induces dimerization and activation of the receptor. Upon activation, CD140b is phosphorylated at multiple tyrosine sites and, in turn, an intracellular phosphorylation cascade is initiated. PDGFR localizes primarily to membrane invaginations termed caveolae, compartments that are enriched in several of its downstream effectors, including phosphatidylinositol 3'-kinase, Src, and phospholipase C-gamma (PLC-gamma). The J105-412 monoclonal antibody recognizes the phosphorylated tyrosine 1021 (pY1021) in the C-terminal noncatalytic region of CD140b, which interacts primarily with PLC-gamma. The orthologous phosphorylation site in mouse PDGFRbeta is Y1020.
Pathways:	Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Inositol Metabolic Process, Glycosaminoglycan Metabolic Process, Smooth Muscle Cell Migration, Platelet-derived growth Factor Receptor Signaling

Application Details

Sample Volume:	20 µL
Restrictions:	For Research Use only

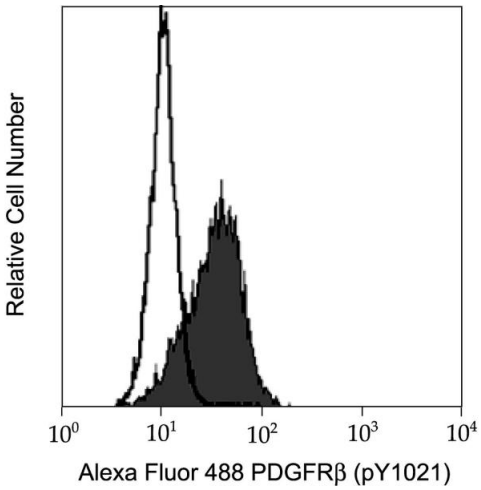
Handling

Format:	Liquid
Buffer:	Aqueous buffered solution containing BSA and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze. The antibody was conjugated to Alexa Fluor® 488 under optimum conditions, and unreacted Alexa Fluor® 488 was removed.

Publications

Product cited in: Claesson-Welsh: "Platelet-derived growth factor receptor signals." in: **The Journal of biological chemistry**, Vol. 269, Issue 51, pp. 32023-6, (1995) (PubMed).

Images



Flow Cytometry

Image 1.