

Technical Data Sheet

Polyclonal Rabbit Anti-βPDGFR (C-Terminus)

Product Information

Material Number:	554288
Alternate Name:	Platelet Derived Growth Factor Receptor β subunit
Size:	0.1 ml
Immunogen:	Human βPDGFR (C-terminal) Recombinant Protein
Reactivity:	QC Testing: Mouse Tested in Development: Human
Target MW:	160 kDa & 180 kDa
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Platelet derived growth factor (PDGF) plays a role in regulating a number of biological processes including cellular proliferation and development through signal transduction. PDGF consists of homo- or heterodimers of two chains, A and B, which are encoded by two separate genes. The three possible combinations of the PDGF chains, AA, AB, and BB are all biologically active. The PDGF receptor (PDGFR) is a protein tyrosine kinase. Ligand binding to the PDGFR leads to tyrosine phosphorylation of numerous intracellular proteins, including the receptor itself. The PDGFR consists of two subunits, α and β, which are encoded by two separate genes. The α subunit binds to both the A and B PDGF chains with high affinity, whereas the β subunit binds only to the B chain with high affinity. Ligand binding results in receptor dimerization, with the PDGF type (AA, AB, or BB) influencing the resulting PDGFR subunit composition (αα, αβ, or ββ). That is, PDGF-AA binds to αα receptors, PDGF-AB binds to αα and αβ receptors, and PDGF-BB binds to αα, αβ, or ββ receptors. This polyclonal antibody has been reported to recognize both mouse and human βPDGFR. The immature and mature forms of the βPDGFR subunit have been reported to be observed by SDS-PAGE migrating at 160 and 180 kDa, respectively.

Preparation and Storage

The polyclonal antibody was purified from antiserum by affinity chromatography.

Store undiluted at 4°C.

Application Notes

Application

Western blot	Routinely Tested
Immunoprecipitation	Reported

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
554021	HRP Goat Anti-Rabbit Ig	1.0 ml	(none)
611452	NIH 3T3 Cell Lysate	500 µg	(none)

Product Notices

- Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

- Bazenet CE, Kazlauskas A. The PDGF receptor alpha subunit activates p21ras and triggers DNA synthesis without interacting with rasGAP. *Oncogene*. 1993; 9(2):517-525.(Biology)
- Kazlauskas A, Cooper JA. Phosphorylation of the PDGF receptor beta subunit creates a tight binding site for phosphatidylinositol 3 kinase. *EMBO J*. 1990; 9(10):3279-3286.(Biology)
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Valius M, Kazlauskas A. Phospholipase C-gamma 1 and phosphatidylinositol 3 kinase are the downstream mediators of the PDGF receptor's mitogenic signal. *Cell.* 1993; 73(2):321-334.(Biology)