Technical Data Sheet

Purified Mouse Anti-Human CD140b

Product Information

Material Number: 610113

Alternate Name: PDGF Receptor β

Size 50 μg **Concentration:** $250 \ \mu g/ml$ Clone: 28/CD140b

Human PDGF Receptor β aa. 1-187 Immunogen:

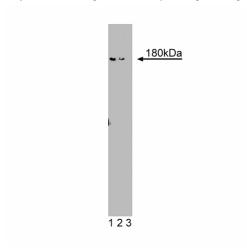
Isotype: Mouse IgG2b Reactivity: QC Testing: Human

Target MW: 180 kDa

Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium Storage Buffer:

Description

Platelet-derived growth factor (PDGF) is a potent mitogen for cells of esenchymal origin and exerts its effects by binding to the PDGF receptor (PDGFR), a transmembrane protein tyrosine kinase. Both PDGF and PDGFR consist of subunits that form homo- or heterodimers with varying specificities: PDGF-AA binds only to αα PDGFR, PDGF-AB binds to both αα and αβ PDGFR, and PDGF-BB binds to all three PDGFRs. Ligand binding induces phosphorylation and activation of the receptor and, in turn, initiation of an intracellular phosphorylation cascade. PDGFR localizes primarily to membrane invaginations termed caveolae, compartments that are enriched in several of its downstream effectors, including PI3 kinase, Shc, NCK, and PTP1D. Additionally, the β subunit of PDGFR has been implicated in cellular transformation. This effect is mediated by a C-terminal region of PDGFRβ and depends on pathways that involve either PLCβ or PI3 kinase.



Western blot analysis of CD140b on a Hs68 cell lysate (Human skin fibroblasts; ATCC CRL-1635). Lane 1: 1:50, lane 2: 1:100, lane 3: 1:200 dilution of the mouse anti-CD140b antibody. CD140b (PDGF Receptor β) may be observable as a band migrating at ~ 180 kDa.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20°C.

Application Notes

Application

- Indiana		
Western blot	Routinely Tested	
Immunofluorescence	Tested During Development	
Immunohistochemistry	Tested During Development	
Immunoprecipitation	Not Recommended	

Recommended Assay Procedure:

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

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Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. 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.
- 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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Shu L, Lee L, Shayman JA. Regulation of phospholipase C-gamma activity by glycosphingolipids. *J Biol Chem.* 2002; 277(21):18447-18453.(Biology: Western blot)

610113 Rev. 1 Page 2 of 2