Technical Data Sheet

Purified Mouse Anti-Human CD140b

Product Information

Material Number: 558820
Alternate Name: PDGF Receptor β chain
Size: 0.1 mg
Concentration: 0.5 mg/ml
Clone: 28D4
Isotype: Mouse IgG2a, κ
Reactivity: QC Testing: Human
Workshop: VI E023
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description
Reacts with platelet derived growth factor (PDGF) receptor β, a 170-190 kDa single transmembrane glycoprotein expressed on fibroblasts, smooth muscle cells, glial cells and chondrocytes. PDGF receptors, α and β, are single glycoproteins with intracellular tyrosine kinase domains. They are structurally similar to M-CSF receptor and CD117 (c-kit). Their ligand, PDGF, is a mitogen for connective tissue cells and glial cells. PDGF plays a role in wound healing and acts as a chemoattractant for fibroblasts, smooth muscle cells, glial cells, monocytes and neutrophils. Functional PDGF is secreted as a disulfide-linked dimer of A and B chains (PDGF-AA, PDGF-BB or PDGF-AB). Binding of divalent PDGF induces receptor dimerization with three possible forms: αα, αβ, ββ. The PDGF receptor α-subunit binds both PDGF A and B chains, whereas the receptor β-subunit binds only PDGF B chain. Both receptor subunits can stimulate mitogenic responses, only the β subunit can induce chemotaxis. 28D4 is specific for PDGFRβ and does not cross-react with PDGFRα.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at 4° C.

Application Notes

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<thead>
<tr>
<th>Application</th>
<th>Routine Tested</th>
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<tbody>
<tr>
<td>Flow cytometry</td>
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### Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>555571</td>
<td>Purified Mouse IgG2a, κ Isotype Control</td>
<td>0.1 mg</td>
<td>G155-178</td>
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<tr>
<td>555988</td>
<td>FITC Goat Anti-Mouse IgG/IgM</td>
<td>0.5 mg</td>
<td>Polyclonal</td>
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### Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [wwwbdbiosciencescompharnngenprotocols](http://wwwbdbiosciencescompharnngenprotocols) for technical protocols.
3. 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

