Technical Data Sheet

Purified Rat Anti-Mouse CD41

Product Information

Material Number: 553847
Alternate Name: Itga2b; Integrin alpha 2b; Integrin alpha-IIb; Integrin α IIb; GpIIb
Size: 0.5 mg
Concentration: 0.5 mg/ml
Clone: MWReg30
Immunogen: Mouse Platelets
Isotype: Rat IgG1, κ
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The MWReg30 monoclonal antibody specifically binds to CD41, which is also known as glycoprotein IIb (gpIIb, GP IIb), Integrin α IIb chain, or Integrin alpha 2b. CD41 is a transmembrane glycoprotein that is encoded by Itga2b. CD41 associates with Integrin β3 chain (gpIIIa or CD61) to form the gpIIb/IIIa (CD41/CD61) complex. CD41/CD61 is expressed on platelets, megakaryocytes, and early hematopoietic progenitors. The integrin complex binds to fibrinogen, fibronectin, vitronectin, von Willebrand factor, and thrombospondin. It is important for platelet adhesion and aggregation, and it may play a role in osteolytic tumor metastasis.

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

Application

<table>
<thead>
<tr>
<th>Application</th>
<th>Status</th>
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<tbody>
<tr>
<td>Flow cytometry</td>
<td>Routinely Tested</td>
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<tr>
<td>Cytotoxicity</td>
<td>Reported</td>
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<tr>
<td>Immunohistochemistry-frozen</td>
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<tr>
<td>Immunoprecipitation</td>
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<td>Depletion</td>
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<td>Induction</td>
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<tr>
<td>Inhibition</td>
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Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tbody>
<tr>
<td>553922</td>
<td>Purified Rat IgG1, κ Isotype Control</td>
<td>0.5 mg</td>
<td>R3-34</td>
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<tr>
<td>554016</td>
<td>FITC Goat Anti-Rat Ig</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.
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.
4. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.

References

Ferkowicz MJ, Starr M, Xie X, et al. CD41 expression defines the onset of primitive and definitive hematopoiesis in the murine embryo. Development. 2003;130(18):4393-4403. (Biology)