Technical Data Sheet

Purified Rat Anti-Mouse CD24

Product Information

Material Number: 553146
Alternate Name: Heat Stable Antigen
Size: 0.5 mg
Concentration: 0.5 mg/ml
Clone: J11d
Immunogen: C3H/HeJ mouse thymocytes
Isotype: Rat (LEW) IgM, κ
Reactivity: QC Testing: Mouse

Description

The J11d antibody reacts with CD24 (Heat Stable Antigen, HSA or HsAg), a variably glycosylated membrane protein found on erythrocytes, granulocytes, monocytes, and lymphocytes. Levels of expression of CD24 vary during differentiation of the T and B cell lineages: Immature B cells in the bone marrow and spleen of adult mice express high levels of CD24, whereas mature peripheral B cells express intermediate levels of CD24. Similarly, the majority of thymocytes express high levels of CD24, while mature thymic and peripheral T cells do not express CD24. Dendritic cells of the thymus, spleen, liver, and epidermal Langerhans cells have also been reported to express CD24. CD24 is not expressed by NK cells. CD24 is a ligand of CD62P (P-selectin). In vitro treatment of splenocytes with J11d antibody plus complement reduces primary IgM responses and proliferative responses to LPS. While the monoclonal antibodies 30-F1 (Cat. no. 558777), M1/69 (Cat. no. 557436), and J11d all react with CD24, they show subtle differences in the level of staining of different cell populations. When possible, investigators should continue to use the same monoclonal antibody as used in previous studies.

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>Immunohistochemistry-frozen</td>
<td>Tested During Development</td>
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<tr>
<td>Depletion</td>
<td>Reported</td>
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<tr>
<td>Western blot</td>
<td>Reported</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>553940</td>
<td>Purified Rat IgM, κ Isotype Control</td>
<td>0.5 mg</td>
<td>R4-22</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.

References

Allman DM, Ferguson SE, Lentz VM, Cancro MP. Peripheral B cell maturation. II. Heat-stable antigen(hi) splenic B cells are an immature developmental intermediate in the production of long-lived marrow-derived B cells. *J Immunol.* 1993; 151(9):4431-4444.(Biology)


