Purified Rat anti-Mouse B7-H4

Product Information

Material Number: 562237
Alternate Name: Vtcn1; B7H4; B7S1; B7x
Size: 0.1 mg
Concentration: 0.5 mg/ml
Clone: MIH29
Immunogen: Mouse B7-H4 Transfected Cell Line
Isotype: Rat (SD) IgM, \kappa
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The MIH29 monoclonal antibody specifically binds to B7-H4 (also known as, B7x or B7S1). The \textit{Vtcn1} (V-set domain containing T cell activation inhibitor 1) gene encodes the B7-H4 protein that is comprised of 283 amino acids with a calculated molecular weight of 30.9 kDa. Detection of B7-H4 expression in immune cells at both the transcriptional and cell-surface protein levels is controversial. However, detection of soluble mouse B7-H4 has been reported in several mouse disease model systems including contact hypersensitivity, autoimmunity and allergy. B7-H4 reportedly can positively or negatively regulate T cell responses and is over-expressed in various tumor model systems. B7-H4 may also play a role in innate immunity by inhibiting neutrophil expansion.

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application
Flow cytometry Routinely Tested

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>555950</td>
<td>Purified Rat IgM, \kappa Isotype Control</td>
<td>0.1 mg</td>
<td>R4-22</td>
</tr>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 ml</td>
<td>(none)</td>
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<tr>
<td>550767</td>
<td>PE Goat Anti-Rat Ig</td>
<td>0.2 mg</td>
<td>Polyclonal</td>
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</tbody>
</table>

Flow cytometric analysis of mouse B7-H4 expression by B7-H4-transfected P815 cells. Non-transfected and B7-H4-transfected P815 cells were surface stained with either Purified Rat IgM, \kappa Isotype Control (Cat. No. 555950) or Purified Rat Anti-Mouse B7-H4 (Cat. No. 562237) followed by PE Goat Anti-Rat Ig (Cat. No. 550767). Flow cytometric fluorescence histograms showing the expression of B7-H4 (or Ig Isotype Control background staining) by untransfected (Left Panel) or B7-H4-transfected P815 cells (Right Panel) were generated for gated events with the forward and side light-scatter characteristics of viable cells. Flow cytometry was performed using a BD™ LSR II Cytometer System.
Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Please refer to wwwbdbiosciencescompharminingprotocols for technical protocols.
4. 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


Prasad DV, Richards S, Mai XM, Dong C. B7S1, a novel B7 family member that negatively regulates T cell activation. Immunity. 2003;18(6):863-873. (Biology)

