Purified Mouse Anti-Rat CD4

Product Information

Material Number: 550296
Alternate Name: Cd4; CD4 antigen; p55; W3/25 antigen; T-cell surface glycoprotein CD4
Size: 1.0 ml
Concentration: 62.5 µg/ml
Clone: OX-35
Immunogen: Rat T-cell blasts
Isotype: Mouse (BALB/c) IgG2a, κ
Reactivity: QC Testing: Rat
Storage Buffer: Aqueous buffered solution containing BSA, goat serum, and ≤0.09% sodium azide.

Description

The OX-35 clone has been reported to react with the CD4 antigen on most thymocytes, a subpopulation of mature T lymphocytes (i.e. MHC class II-restricted T cells, including most T helper cells), monocytes, macrophages, some dendritic cells, and microglia. CD4 is an antigen coreceptor on the T-cell surface that interacts with MHC class II molecules on antigen-presenting cells. It participates in T-cell activation through it's association with the T-cell receptor complex and protein tyrosine kinase Lck. The OX-35 clone has been reported to bind to a different epitope of CD4 than that recognized by the W3/25 and OX-38 clones.

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

<table>
<thead>
<tr>
<th>Application</th>
<th>Flow cytometry</th>
<th>Routinely Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunohistochemistry-frozen</td>
<td></td>
<td>Tested During Development</td>
</tr>
<tr>
<td>Immunohistochemistry-formalin (antigen retrieval required)</td>
<td></td>
<td>Not Recommended</td>
</tr>
</tbody>
</table>

Recommended Assay Procedure:

Immunohistochemistry: Clone OX-35 is recommended to test for immunohistochemical staining of acetone-fixed frozen sections of rat spleen and thymus. IHC of formalin-fixed paraffin embedded sections is not recommended. This antibody has been reported to stain the CD4 subset of T lymphocytes. The isotype control recommended for use with this antibody is purified mouse IgG2a (Cat. No. 550339). For optimal indirect immunohistochemical staining, the OX-35 antibody should be titrated (1:10 to 1:50 dilution) and visualized via a three-step staining procedure in combination with biotin conjugated rat anti-mouse IgG2a (Cat. No. 550332) as the secondary antibody and strepuravidin-HRP (Cat. No. 550946) together with the DAB detection system (Cat. No. 550880).
Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>550339</td>
<td>Purified Mouse IgG2a κ Isotype Control</td>
<td>1.0 ml</td>
<td>C1.18.4</td>
</tr>
<tr>
<td>550332</td>
<td>Biotin Rat Anti-Mouse IgG2a</td>
<td>1.0 ml</td>
<td>R19-15</td>
</tr>
<tr>
<td>550880</td>
<td>DAB Substrate Kit</td>
<td>500 tests</td>
<td>(none)</td>
</tr>
<tr>
<td>550946</td>
<td>Streptavidin HRP</td>
<td>50 ml</td>
<td>(none)</td>
</tr>
<tr>
<td>559148</td>
<td>Antibody Diluent for IHC</td>
<td>125 ml</td>
<td>(none)</td>
</tr>
</tbody>
</table>

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. 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.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. This antibody has been developed for the immunohistochemistry application. However, a routine immunohistochemistry test is not performed on every lot. Researchers are encouraged to titrate the reagent for optimal performance.
5. An isotype control should be used at the same concentration as the antibody of interest.

References


