Technical Data Sheet

Purified NA/LE Hamster Anti-Mouse/Rat CD81

Product Information

Material Number: 562240
Alternate Name: Tspan28; Tapa1; Tapa-1; Target of the antiproliferative antibody 1; Trpm5
Size: 0.5 mg
Concentration: 1.0 mg/ml
Clone: Eat2
Isotype: Armenian Hamster IgG1, κ
Reactivity: QC Testing: Mouse and Rat
Storage Buffer: No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2µm sterile filtered. Endotoxin level is ≤0.01 EU/µg (≤0.001 ng/µg) of protein as determined by the LAL assay.

Description

The Eat2 monoclonal antibody specifically binds to CD81, a 26-kDa nonglycosylated member of the transmembrane 4 integral membrane protein superfamily, expressed by many types of cells. For example, CD81 participates with CD19 and CD21 in the signal transduction complex associated with the B-cell receptor on human B lymphocytes and with the CD4 and CD8 co-receptors on human thymocytes and T lymphocytes. In mouse fetal thymic organ culture, interactions of immature thymocytes with CD81 expressed by thymic stromal cells are required to induce development of T cells with αβ T-cell receptors. Furthermore, CD81 has been shown to play a role in the regulation of mast cell degranulation. Despite its important roles in the immune response and wide tissue distribution, CD81-deficient mice are born without obvious developmental abnormalities. However, these mice have abnormal immune responses, and impaired fertility. Eat2 mAb cross-reacts with the rat CD81 antigen. Eat2 mAb was reported cross-reacting with the rat CD81 antigen.

Preparation and Storage

Store undiluted at 4°C.

This preparation contains no preservatives, thus it should be handled under aseptic conditions.
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>
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<tbody>
<tr>
<td>553968</td>
<td>Purified NA/LE Hamster IgG1 κ Isotype Control</td>
<td>0.5 mg</td>
<td>A19-3</td>
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<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
<td>500 ml</td>
<td>(none)</td>
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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.

References

Miyazaki T, Müller U, Campbell KS. Normal development but differentially altered proliferative responses of lymphocytes in mice lacking CD81. EMBO J. 1997; 16(14):4217-4225. (Biology)
Tsitelov EN, Gutierrez-Ramos JC, Geha RS. Impaired CD19 expression and signaling, enhanced antibody response to type II T independent antigen and reduction of B-1 cells in CD81-deficient mice. Proc Natl Acad Sci U S A. 1997; 94(20):10844-10849. (Biology)