Datasheet: MCA1846F

<table>
<thead>
<tr>
<th>Description:</th>
<th>HAMSTER ANTI MOUSE CD81:FITC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specificity:</td>
<td>CD81</td>
</tr>
<tr>
<td>Other names:</td>
<td>TAPA-1</td>
</tr>
<tr>
<td>Format:</td>
<td>FITC</td>
</tr>
<tr>
<td>Product Type:</td>
<td>Monoclonal Antibody</td>
</tr>
<tr>
<td>Clone:</td>
<td>Eat2</td>
</tr>
<tr>
<td>Isotype:</td>
<td>IgG1</td>
</tr>
<tr>
<td>Quantity:</td>
<td>0.1 mg</td>
</tr>
</tbody>
</table>

**Product Details**

**RRID**  AB_323466

**Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Flow Cytometry</td>
</tr>
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<td></td>
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</table>

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

**Target Species**  Mouse

**Species Cross Reactivity**  Reacts with: Rat

**N.B.** Antibody reactivity and working conditions may vary between species.

**Product Form**  Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

**Max Ex/Em**

<table>
<thead>
<tr>
<th>Fluorophore</th>
<th>Excitation Max (nm)</th>
<th>Emission Max (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FITC</td>
<td>490</td>
<td>525</td>
</tr>
</tbody>
</table>

**Preparation**  Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

**Buffer Solution**  Phosphate buffered saline

**Preservative Stabilisers**  0.09% Sodium Azide  1% Bovine Serum Albumin

**Approx. Protein Concentrations**  IgG concentration 0.1 mg/ml

**Immunogen**  38C13, murine B cell line.
Fusion Partners
Spleen cells from immunised Armenian hamsters were fused with cells of the mouse PX3-Ag.8.653 myeloma cell line.

Specificity
Hamster anti Mouse CD81 antibody, clone Eat2 recognizes mouse and rat CD81, also known as TAPA-1 or Target of the antiproliferative antibody 1. CD81 is a 236 amino acid ~26 kDa multipass transmembrane protein belonging to the TM4SF family (UniProt: P35762). In rodents CD81 is expressed at much higher levels on resting B cells than on T cells, although increased expression on T cells is found following activation. Hamster anti Mouse CD81 antibody, clone Eat2 induces homotypic aggregation of B cells and inhibits anti Ig and IL-4 induced proliferation (Maecker et al. 2000). Eat 2 requires the presence of both extracellular loops of TAPA-1 for binding.

Mice lacking CD81 demonstrate reduced fertility through impaired oocyte-sperm fusion, double knockout CD81/-/- CD9/-/- mice are completely infertile suggesting complimentary roles in oocyte-sperm fusion (Rubenstein et al. 2006).

Flow Cytometry
Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/B).

References

## Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

## Guarantee

18 months from date of despatch.

## Health And Safety Information

Material Safety Datasheet documentation #10041 available at:


## Regulatory

For research purposes only

## Related Products

### Recommended Useful Reagents

- MOUSE SEROBLOCK FcR (BUF041A)
- MOUSE SEROBLOCK FcR (BUF041B)