Technical Data Sheet

Purified Rat Anti-Mouse CD71

Product Information

Material Number: 553264
Alternate Name: Transferrin Receptor; TR; TfR; TfR1; Tfrc; Trfr; Mtvr-1
Size: 0.5 mg
Concentration: 0.5 mg/ml
Clone: C2 (also known as C2F2)
Immunogen: Mouse cell line
Isotype: Rat (WF) IgG1, κ
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The C2 monoclonal antibody specifically binds to CD71, the transferrin receptor. CD71 is a disulfide-linked homodimer of 95-kDa subunits. CD71 mediates one of the cellular mechanisms for iron uptake, and its expression is regulated according to the cell’s iron requirements. It is expressed at high levels on developing erythroid cells, and it is upregulated after mitogenic activation of B or T lymphocytes. The C2 monoclonal antibody selectivity inhibits some types of T- and B-cell activation by down-regulation of transferrin receptor expression, but it does not block binding of transferrin.

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>
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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>Immunofluorescence</td>
<td>Reported</td>
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<tr>
<td>Inhibition</td>
<td>Reported</td>
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<tr>
<td>Immunohistochemistry-paraffin</td>
<td>Not Recommended</td>
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</tbody>
</table>

Recommended Assay Procedure:

IHC of paraffin-embedded sections is not recommended. Other reported applications include in vitro inhibition of cell proliferation and immunofluorescence microscopy.

Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>553673</td>
<td>PE Rat Anti-Mouse TER-119/Erythroid Cells</td>
<td>0.2 mg</td>
<td>TER-119</td>
</tr>
<tr>
<td>553922</td>
<td>Purified Rat IgG1, κ Isotype Control</td>
<td>0.5 mg</td>
<td>R3-34</td>
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<tr>
<td>553892</td>
<td>FITC Mouse Anti-Rat IgG1</td>
<td>0.5 mg</td>
<td>RG11/39.4</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

Fujimoto T. GPI-anchored proteins, glycosphingolipids, and sphingomyelin are sequestered to caveolae only after crosslinking. J Histochem Cytochem. 1996; 44(8):929-941. (Clone-specific: Immunofluorescence)

