

**DESCRIPTION**

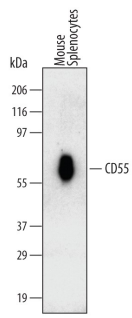
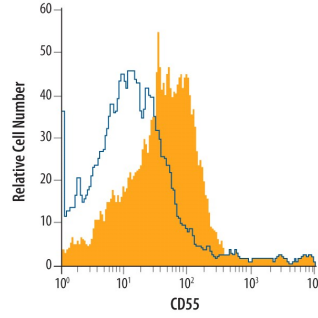
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse CD55/DAF in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human CD55 or recombinant mouse CD97 is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 583905
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse CD55/DAF Met1-Pro359 Accession # Q61475
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	2 µg/mL	See Below
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

**DATA**

<p><b>Western Blot</b></p>  <p><b>Detection of Mouse CD55/DAF by Western Blot.</b> Western blot shows lysates of mouse splenocytes. PVDF Membrane was probed with 2 µg/mL of Rat Anti-Mouse CD55/DAF Monoclonal Antibody (Catalog # MAB5376) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for CD55/DAF at approximately 60 kDa (as indicated). This experiment was conducted under non-reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Flow Cytometry</b></p>  <p><b>Detection of CD55/DAF in Mouse Splenocytes by Flow Cytometry.</b> Mouse splenocytes were stained with Rat Anti-Mouse CD55/DAF Monoclonal Antibody (Catalog # MAB5376, filled histogram) or isotype control antibody (Catalog # MAB006, open histogram), followed by Phycoerythrin-conjugated Anti-Rat IgG F(ab')<sub>2</sub> Secondary Antibody (Catalog # F0105B).</p>
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**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

CD55 (Decay-accelerating factor/DAF) is a glycoprotein member of the RCA family of molecules. It is found on blood cells, epithelium and endothelium, and serves both as a receptor for CD97, and a negative regulator of the C3 convertases, C4b2a and C3bBb. Mature mouse CD55 is the product of two genes that arose by duplication. There is a 55-60 kDa, 356 amino acid (aa), GPI-linked form that is ubiquitously expressed. This molecule contains four SUSHI domains (aa 35-285), a Ser/Thr-rich region (aa 288-362), and a GPI-anchor at Gly362. There is also a 50 kDa, 379 aa, type I transmembrane form that is testis-associated. It shows the same domain architecture and is 93% aa identical to the GPI-form. At least four GPI gene isoforms exist. They diverge after Ile285 and show deletions and substitutions. Over aa 35-359, mouse CD55 is 66% and 50% aa identical to rat and human CD55, respectively.