

**DESCRIPTION**

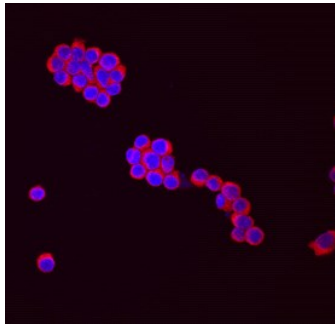
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human AICDA in direct ELISAs.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 359218
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human AICDA Met1-Leu198 Accession # Q9GZX7
<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 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>Immunocytochemistry</b>	8-25 µg/mL	See Below

**DATA**

<p><b>Immunocytochemistry</b></p> 	<p><b>AICDA in Ramos Human Cell Line.</b> AICDA was detected in immersion fixed Ramos human Burkitt's lymphoma cell line using Rat Anti-Human AICDA Monoclonal Antibody (Catalog # MAB39102) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to surface and cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.</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**

AICDA, also known as AID, is a 24 kDa cytidine deaminase that converts deoxycytidine to deoxyuridine in single stranded DNA. Its expression is restricted to activated lymph node and tonsillar B cells and is required for terminal B cell differentiation. Loss of function mutations of AICDA cause severe humoral immunodeficiency by preventing immunoglobulin class switching and somatic hypermutation. Human AICDA shares 92% - 95% amino acid sequence identity with bovine, canine, and mouse AICDA.