

## DESCRIPTION

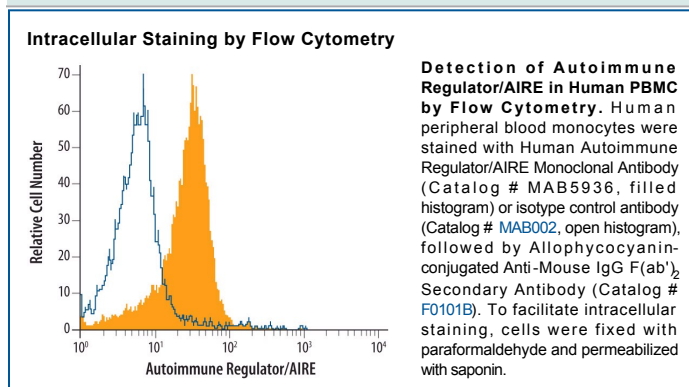
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Autoimmune Regulator/AIRE in direct ELISAs. In Western blots, no cross-reactivity with recombinant mouse AIRE is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 614530
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E.coli</i> -derived recombinant human Autoimmune Regulator/AIRE Ser476-Ser545 Accession # O43918
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

## 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>Intracellular Staining by Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below

## DATA



## 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.
<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 from date of receipt, 2 to 8 °C, reconstituted.</li> <li>● 6 months from date of receipt, -20 to -70 °C, reconstituted.</li> </ul>

## BACKGROUND

Autoimmune Regulator (AIRE) is an approximately 60 kDa nuclear and cytosolic protein that is required for the development of T cell tolerance. It regulates the expression of self-antigens by thymic epithelial cells, and mutations in AIRE are causative of the autoimmune disorder, APECED. AIRE regulates gene transcription through interactions with DNA, histone H3, and the nuclear matrix. It contains one HSD domain (aa 1-105), a nuclear localization sequence (aa 113-133), one SAND domain (aa 181-280), and two PHD zinc finger domains (aa 299-340 and aa 434-475). Alternate splicing of human AIRE generates isoforms that lack the HSR and SAND domains and/or the second PHD domain. Within aa 476-545, human AIRE shares 65% and 63% aa sequence identity with mouse and rat AIRE, respectively.