

# Human Autoimmune Regulator/AIRE PE-conjugated Antibody

Monoclonal Mouse IgG<sub>1</sub> Clone # 614530

Catalog Number: IC5936P 100 TESTS

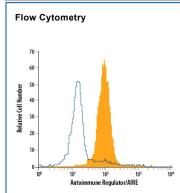
DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human Autoimmune Regulator/AIRE in direct ELISAs. In Western blots, no cross-reactivity with recombinant mouse AIRE is observed.		
Source	Monoclonal Mouse IgG <sub>1</sub> Clone # 614530		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	E. coli-derived recombinant human Autoimmune Regulator/AIRE Ser476-Ser545 Accession # O43918		
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm		
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.		
	*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Shee (SDS) for additional information and handling instructions.		

#### **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.

	Recommended Concentration	Sample
Flow Cytometry	10 μL/10 <sup>6</sup> cells	See Below

## DATA



Detection of Autoimmune Regulator/AIRE in Human Blood Monocytes by Flow Cytometry. Human peripheral blood monocytes were stained with Mouse Anti-Human Autoimmune Regulator/AIRE PE-conjugated Monoclonal Antibody (Catalog # IC5936P, filled histogram) or isotype control antibody (Catalog # IC002P, open histogram). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilizated with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules.

## PREPARATION AND STORAGE

**Shipping**The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage

Protect from light. Do not freeze.

• 12 months from date of receipt, 2 to 8 °C as supplied.

### 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.

