

DESCRIPTION

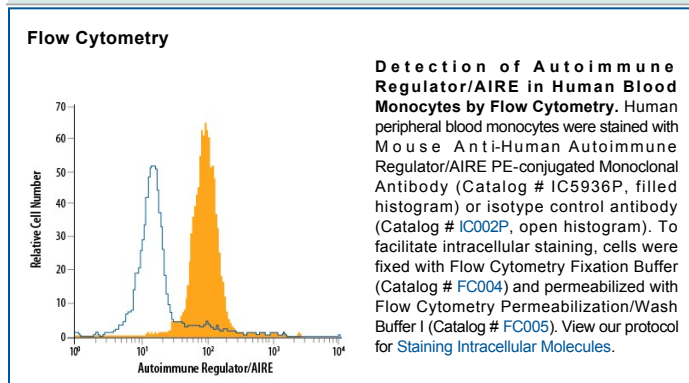
Species Reactivity	Human
Specificity	Detects human Autoimmune Regulator/AIRE in direct ELISAs. In Western blots, no cross-reactivity with recombinant mouse AIRE is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 614530
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -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 Sheet (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 ⁶ cells	See Below

DATA



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.