

Human Autoimmune Regulator/AIRE Alexa Fluor® 405-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF5936V 100 µg

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human AIRE in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	E. coli-derived recombinant human AIRE Ser476-Ser545 Accession # 043918
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
	*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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

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

AIRE (Autoimmune Regulator; also APECED) is a 58-60 kDa member of the PHD Zn-finger family of transcription factors. It appears to have restricted expression, being identified in thymic medullary epithelium, dendritic cells and neutrophils. AIRE regulates the expression of self-antigens in thymus. In particular, genes coding for these antigens are generally inactive, and show minimal H3K4me3 and AcH3 reactivity in their promoters. Human AIRE is 545 amino acids (aa) in length. It contains multiple domains, including an HSR domain that mediates homodimerization (aa 1-105), an NLS (aa 131-133), a SAND domain (aa 181-280), and two Zn-finger PHD domains (aa 296-343 and 434-475) that bind to nonmethylated histone H3. There are isoforms that show a Trp substitution for aa 437-467, a 95 aa substitution for aa 1-292, and a 75 aa substitution for aa 377-545. Over aa 476-545, human AIRE shares 71% aa identity with mouse AIRE.

PRODUCT SPECIFIC NOTICES

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