

Rabbit AIRE Polyclonal Antibody | anti-AIRE antibody

Anti-AIRE Antibody

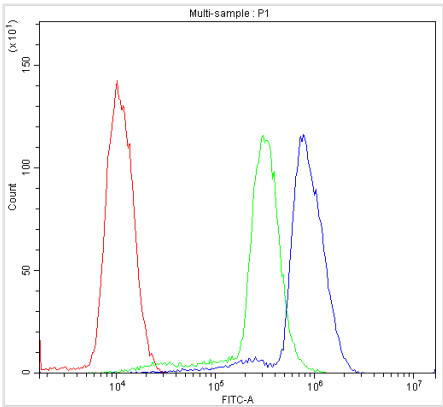
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA46634	Rabbit	Human, Rat No cross reactivity with other proteins.	Western Blot

PRODUCT SYNONYMS

AIRE; Polyclonal Antibody; Anti-AIRE Antibody; AIRE1; APECED; APECED protein; APS1; APS 1; APSI; Autoimmune regulator; PGA1; O43918; autoimmune regulator; anti-AIRE antibody

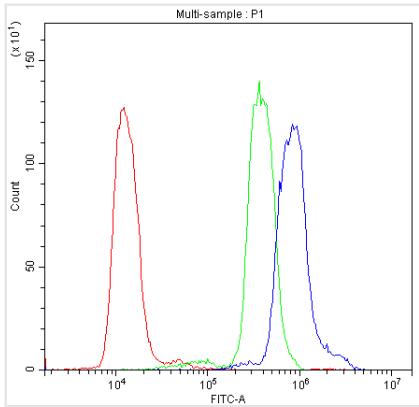
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Rat No cross reactivity with other proteins.
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized
Sequence Length	545
Applicable Applications for anti-AIRE antibody	WB (Western Blot)
Immunogen	E Coli-derived human AIRE recombinant protein (Position: M1-K120). Human AIRE shares 87.2% amino acid (aa) sequence identity with mouse AIRE.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Na ₃ N.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	At -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



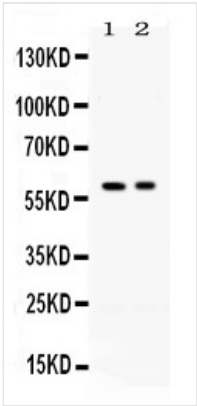
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of THP-1 cells using anti-AIRE antibody (AAA46634).Overlay histogram showing THP-1 cells stained with AAA46634 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-AIRE Antibody (AAA46634,1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of HL-60 cells using anti-AIRE antibody (AAA46634).Overlay histogram showing HL-60 cells stained with AAA46634 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-AIRE Antibody (AAA46634,1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of AIRE using anti- AIRE antibody (AAA46634).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: rat testis tissue lysates,Lane 2: HELA whole cell lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- AIRE antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for AIRE at approximately 58KD. The expected band size for AIRE is at 58KD.

ADDITIONAL INFORMATION

Related Product Information for anti-AIRE antibody

Rabbit IgG polyclonal antibody for Autoimmune regulator (AIRE) detection.
Background: The autoimmune regulator (AIRE) is a protein that in humans is encoded by the AIRE gene. This gene encodes a transcriptional regulator that forms nuclear bodies and interacts with the transcriptional coactivator CREB binding protein. The encoded protein plays an important role in immunity by regulating the expression of autoantigens and negative selection of autoreactive T-cells in the thymus. Mutations in this gene cause the rare autosomal-recessive systemic autoimmune disease termed autoimmune polyendocrinopathy with candidiasis and ectodermal dystrophy (APECED).

References	1. Lindmark E, Chen Y, Georgoudaki AM, Dudziak D, Lindh E, Adams WC, Loré K, Winqvist O, Chambers BJ, Karlsson MC, et al. (2013). "AIRE expressing marginal zone dendritic cells balances adaptive immunity and T-follicular helper cell recruitment.". Journal of Autoimmunity 42: 62-70. 2. Liston A, Lesage S, Wilson J, Peltonen L, Goodnow CC (April 2003). "Aire regulates negative selection of organ-specific T cells". Nat. Immunol. 4(4): 350-4.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4557291
NCBI GeneID	326
NCBI Accession #	NP_000374.1
NCBI GenBank Nucleotide #	NM_000383.3
UniProt Accession #	O43918; O43922; O43932; O75745; B2RP50
Molecular Weight	36,501 Da
NCBI Official Full Name	autoimmune regulator
NCBI Official Synonym Full Names	autoimmune regulator
NCBI Official Symbol	AIRE
NCBI Official Synonym Symbols	APS1; APSI; PGA1; AIRE1; APECED
NCBI Protein Information	autoimmune regulator
UniProt Protein Name	Autoimmune regulator
UniProt Gene Name	AIRE
UniProt Synonym Gene Names	APECED; APECED protein
UniProt Entry Name	AIRE_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.