Mouse Autoimmune Regulator/AIRE Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF6184

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Autoimmune Regulator/AIRE in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant mouse Autoimmune Regulator/AIRE Ser476-Ser552 Accession # Q9Z0E3
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

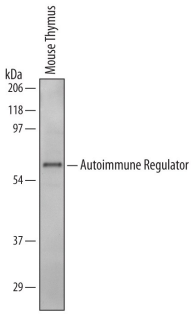
APPLICATIONS

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
Western Blot	1 µg/mL	See Below

DATA

Western Blot



Detection of Mouse Autoimmune Regulator/AIRE by Western Blot. Western blot shows lysates of mouse thymus tissue. PVDF Membrane was probed with 1 µg/mL of Goat Anti-Mouse Autoimmune Regulator/AIRE Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6184) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for Autoimmune Regulator/AIRE at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

AIRE (Autoimmune regulator; also APECED) is a 58-60 kDa transcriptional regulator that exhibits tight regulation of its expression. It is widely expressed in lymphoid organs, but is most pronounced in thymic medullary epithelium, where it induces the expression of organ specific antigens that are used to sequester and delete autoreactive lymphocytes. Mouse AIRE is 552 amino acids (aa) in length. It contains multiple domains, including an HSR domain with two LXXLL motifs (aa 1-106), an NLS (aa 114-134), one SAND domain (aa 182-282) and two PHD zinc-finger regions (aa 298-345; 434-475). AIRE will homodimerize and tetramerize. There are multiple potential isoforms that involve various combinations of deletions of aa 265-268, 368-426 and Lys296, plus a 42 aa substitution for aa 368-552. Over aa 476-552, mouse AIRE shares 91% and 65% aa identity with rat and human AIRE, respectively.