



From Biology to Discovery™

APECED Antibody

Subcategory: Rabbit Polyclonal Antibody

Cat. No.: 252014

Unit: 0.1 mg

Description:

Autoimmune regulator (APECED) is a transcriptional regulator that binds to DNA as a dimer or as a tetramer, but not as a monomer. APECED binds to G-doublets in an A/T-rich environment; the preferred motif is a tandem repeat of 5'-ATTGGTTA-3' combined with a 5'-TTATTA-3' box. APECED binds to chromatin and interacts selectively with histone H3 that is not methylated at 'Lys-4', not phosphorylated at 'Thr-3' and not methylated at 'Arg-2'. APECED functions as a sensor of histone H3 modifications that are important for the epigenetic regulation of gene expression. APECED functions as a transcriptional activator and promotes the expression of otherwise tissue-specific self-antigens in the thymus, which is important for self tolerance and the avoidance of autoimmune reactions. Defects in APECED are a cause of autoimmune poly-endocrinopathy candidiasis ectodermal dystrophy (APECED), also known as autoimmune polyglandular syndrome type I (APS-1). APECED is an autosomal recessive disease characterized by: (1) autoimmune polyendocrinopathies; (2) chronic mucocutaneous candidiasis; and (3) ectodermal dystrophies. In addition, a high proportion of patients develop squamous cell carcinoma of the oral mucosa. The disease is reported worldwide but is exceptionally prevalent among the Finnish population (incidence 1:25000) and the Iranian jews (incidence 1:9000).

Isotype: Rabbit Ig

Applications: E, WB

Species Reactivity: H

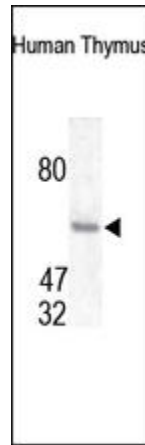
Format: Each vial contains 0.1 mg IgG in 0.1 ml (1 mg/ml) of PBS pH7.4 with 0.09% sodium azide. Antibody was purified by Protein-G affinity chromatography.

Alternate Names: Autoimmune regulator; Autoimmune polyendocrinopathy candidiasis ectodermal dystrophy protein; APECED protein; AIRE; APECED

Accession No.: O43918

Antigen: KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human APECED.

Application Notes: E: 1:10,000-1:50,000; WB: 1:100-1:500



The AIRE Antibody is used in Western blot to detect AIRE in human fetal thymus lysates.

Storage: Store at -20°C. Minimize freeze-thaw cycles. Product is guaranteed one year from the date of shipment.

For research use only, not for diagnostic or therapeutic procedures.