产品名称：AIRE-1 Rabbit Polyclonal Antibody
产品货号：APRab06707

产品概述（Summary）

产品名称（Production Name）	AIRE-1 Rabbit Polyclonal Antibody
描述（Description）	Rabbit polyclonal Antibody
宿主（Host）	Rabbit
应用（Application）	WB,ICC/IF,ELISA
种属反应性（Reactivity）	Human,Mouse

产品性能（Performance）

偶联物（Conjugation）	Unconjugated
修饰（Modification）	Unmodified
同种型（Isotype）	IgG
克隆（Clonality）	Polyclonal
形式（Form）	Liquid
存放说明（Storage）	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液（Buffer）	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
纯化方式（Purification）	Affinity purification

免疫原信息（Immunogen）

基因名（Gene Name）	AIRE
别名（Alternative Names）	AIRE; APECED; Autoimmune regulator; Autoimmune polyendocrinopathy candidiasis ectodermal dystrophy protein; APECED protein
基因 ID（Gene ID）	326.0
蛋白 ID（SwissProt ID）	O43918.The antiserum was produced against synthesized peptide derived from human AIRE. AA range:91-140

产品应用（Application）

稀释比（Dilution Ratio）	WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:5000-1:20000
蛋白分子量（Molecular Weight）	60kDa

产品名称：AIRE-1 Rabbit Polyclonal Antibody
产品货号：APRab06707

研究背景（Background）

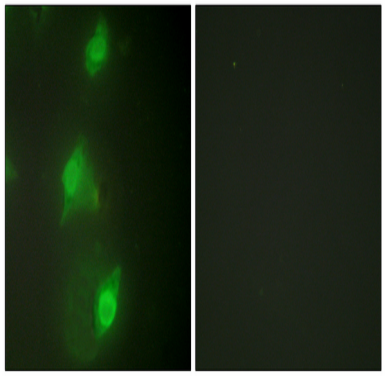
This gene encodes a transcriptional regulator that forms nuclear bodies and interacts with the transcriptional coactivator CREB binding protein. The encoded protein plays an important role in immunity by regulating the expression of autoantigens and negative selection of autoreactive T-cells in the thymus. Mutations in this gene cause the rare autosomal-recessive systemic autoimmune disease termed autoimmune polyendocrinopathy with candidiasis and ectodermal dystrophy (APECED). [provided by RefSeq, Jun 2012],alternative products:Additional isoforms seem to exist. Experimental confirmation may be lacking for some isoforms,disease:Defects in AIRE are a cause of autoimmune poly-endocrinopathy candidiasis ectodermal dystrophy (APECED) [MIM:240300]; also known as autoimmune polyglandular syndrome type I (APS-1). APECED is an autosomal recessive disease characterized by: (1) autoimmune polyendocrinopathies: hypoparathyroidism, adrenocortical failure, IDDM, gonadal failure, hypothyroidism, pernicious anemia, and hepatitis; (2) chronic mucocutaneous candidiasis; (3) ectodermal dystrophies: vitiligo, alopecia, keratopathy, dystrophy of dental enamel, nails and tympanic membranes. 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).,disease:Most of the mutations alter the nucleus-cytoplasm distribution of AIRE and disturb its association with nuclear dots and cytoplasmic filaments. Most of the mutations also decrease transactivation of the protein. The HSR domain is responsible for the homomultimerization activity of AIRE. All the missense mutations of the HSR and the SAND domains decrease this activity, but those in other domains do not. The AIRE protein is present in soluble high-molecular-weight complexes. Mutations in the HSR domain and deletion of PHD zinc fingers disturb the formation of these complexes.,domain:Disruption of the first PHD domain has been shown to lead to reduced transcriptional activity and to localization of the protein mainly in the cytoplasm in small granules. While the PHD zinc fingers are necessary for the transactivation capacity of the protein, other regions also modulate this function.,domain:The HSR domain is required for localization on tubular structures (N-terminal part) and for homodimerization.,domain:The L-X-X-L-L repeats may be implicated in binding to nuclear receptors.,function:Probable transcriptional regulator protein that binds to DNA as dimer and tetramer, but not as a monomer. 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. May be involved in immune regulation.,online information:AIRE mutation db,PTM:Phosphorylated. Phosphorylation could trigger oligomerization.,similarity:Contains 1 HSR domain.,similarity:Contains 1 SAND domain.,similarity:Contains 2 PHD-type zinc fingers.,subcellular location:Associated with tubular structures and in discrete nuclear dots resembling ND10 nuclear bodies. May shuttle between nucleus and cytoplasm.,subunit:Homodimer and homotetramer. Interacts with CREBBP.,tissue specificity:Widely expressed. Expressed at higher level in thymus (medullary epithelial cells and monocyte-dendritic cells), pancreas, adrenal cortex, and testis. Expressed at lower level in the spleen, fetal liver and lymph nodes. Isoforms 2 and 3 seem to be less frequently expressed than isoform 1, if at all.,

研究领域（Research Area）

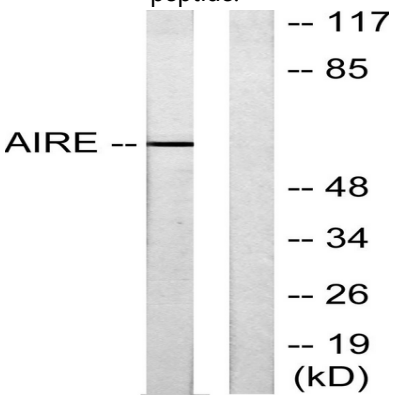
Ubiquitin mediated proteolysis;Primary immunodeficiency;

产品名称：AIRE-1 Rabbit Polyclonal Antibody
产品货号：APRab06707

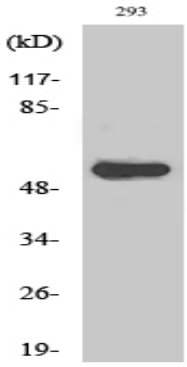
图片（Image Data）



Immunofluorescence analysis of HeLa cells, using AIRE Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, using AIRE Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using AIRE-1 Polyclonal Antibody diluted at 1：1000

注意事项（Note）

For research use only .