abcam

Product datasheet

# Anti-AIRE antibody ab78065

1 Abreviews 2 References 1 图像

## 概述

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|---|---|
| **产品名称** | Anti-AIRE抗体 |
| **描述** | **山羊多克隆抗体**to AIRE |
| **宿主** | Goat |
| **经测试应用** | **适用于:** IHC-P |
| **种属反应性** | **与反应:** Human<br>**预测可用于:** Mouse |
| **免疫原** | Synthetic peptide:<br>C-KDVDLSQPRKGRKP<br>, corresponding to internal sequence amino acids 102-115 of Human AIRE (NP_000374.1).<br>Run BLAST with Run BLAST with |
| **常规说明** | The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.<br>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As |

## 性能

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| **形式** | Liquid |
| **存放说明** | Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles. |
| **存储溶液** | pH: 7.30<br>Preservative: 0.02% Sodium azide<br>Constituents: 0.5% BSA, 0.5% Tris buffered saline |
| **纯度** | Immunogen affinity purified |
| **克隆** | **多克隆** |
| **同种型** | IgG |

## 应用

**The Abpromise guarantee** **Abpromise™承诺保证使用ab78065于以下的经测试应用**

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

| 应用 | Ab评论 | 说明 |
|---|---|---|
| **IHC-P** | | Use a concentration of 2.5 µg/ml. |

## 靶标

**功能**

Transcriptional regulator that binds to DNA as a dimer or as a 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. Binds to nucleosomes (By similarity). 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'. Functions as a sensor of histone H3 modifications that are important for the epigenetic regulation of gene expression. 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.

**组织特异性**

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. Isoform 2 and isoform 3 seem to be less frequently expressed than isoform 1, if at all.

**疾病相关**

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).
Note=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.

**序列相似性**

Contains 1 HSR domain.
Contains 2 PHD-type zinc fingers.
Contains 1 SAND domain.

**结构域**

The L-X-X-L-L repeats may be implicated in binding to nuclear receptors.
The HSR domain is required for localization on tubular structures (N-terminal part) and for homodimerization.
Interacts via the first PHD domain with the N-terminus of histone H3 that is not methylated at 'Lys-4'. 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.

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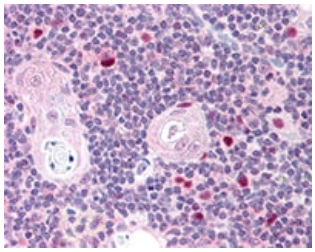
| **翻译后修饰** | Phosphorylated. Phosphorylation could trigger oligomerization. |
| **细胞定位** | Nucleus. Cytoplasm. Associated with tubular structures and in discrete nuclear dots resembling ND10 nuclear bodies. May shuttle between nucleus and cytoplasm. |

## 图片



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AIRE antibody (ab78065)

ab78065 at 2.5µg/ml staining AIRE in human thymus by Immunohistochemistry using formalin-fixed, paraffin-embedded tissue.



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