

# Anti-AIRE antibody - CHIP Grade ab13573

[5 References](#) [4 图像](#)

### 概述

|       |  |
|-------|--|
| 产品名称  | Anti-AIRE抗体- CHIP Grade  |
| 描述    | 山羊多克隆抗体to AIRE - CHIP Grade  |
| 宿主    | Goat   |
| 特异性   | This antibody is expected to recognize two of the tree reported isoforms (NP_000374 and NP_000649 but NOT NP_000650)   |
| 经测试应用 | <b>适用于:</b> CHIP, WB, IHC-P  |
| 种属反应性 | <b>与反应:</b> Human  |
| 免疫原   | Synthetic peptide: QSMARPAAPFPS, corresponding to C terminal amino acids 534-545 of Human AIRE.<br><a href="#">Run BLAST with ExPASy</a> <a href="#">Run BLAST with NCBI</a> |
| 常规说明  | GenBank Accession Number - NP_000374, NP_000649  |

### 性能

|      |   |
|------|---|
| 形式   | Liquid  |
| 存放说明 | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.               |
| 存储溶液 | pH: 7.30<br>Preservative: 0.02% Sodium azide<br>Constituents: 99% Tris buffered saline, 0.5% BSA                                      |
| 纯度   | Immunogen affinity purified   |
| 纯化说明 | Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide. |
| 克隆   | 多克隆   |
| 同种型  | IgG   |

### 应用

**The Abpromise guarantee** **Abpromise™** 承诺保证使用ab13573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  |
|-------|------|---|
| ChIP  |      | Use at an assay dependent concentration.  |
| WB    |      | Use a concentration of 0.5 - 1.5 µg/ml.<br>1 hour primary incubation is recommended for this product.                   |
| IHC-P |      | Use a concentration of 2.5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. |

## 靶标

|       |   |
|-------|---|
| 功能    | <p>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.</p>  |
| 组织特异性 | <p>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.</p>   |
| 疾病相关  | <p>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).<br/>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.</p> |
| 序列相似性 | <p>Contains 1 HSR domain.<br/>Contains 2 PHD-type zinc fingers.<br/>Contains 1 SAND domain.</p>   |
| 结构域   | <p>The L-X-X-L-L repeats may be implicated in binding to nuclear receptors.<br/>The HSR domain is required for localization on tubular structures (N-terminal part) and for homodimerization.<br/>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</p>  |

fingers are necessary for the transactivation capacity of the protein, other regions also modulate this function.

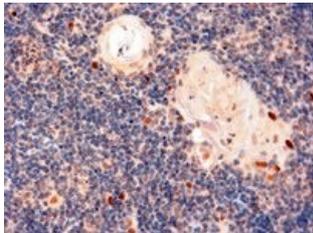
**翻译后修饰**

Phosphorylated. Phosphorylation could trigger oligomerization.

**细胞定位**

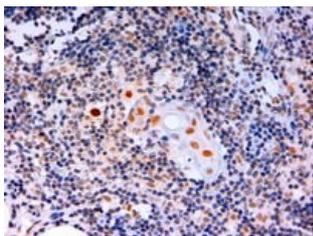
Nucleus. Cytoplasm. Associated with tubular structures and in discrete nuclear dots resembling ND10 nuclear bodies. May shuttle between nucleus and cytoplasm.

**图片**



ab13573 (2µg/ml) staining of paraffin embedded Human Thymus shows staining of select nuclei following steamed antigen retrieval with Tris/EDTA buffer pH 9 and HRP-staining.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AIRE antibody - ChIP Grade (ab13573)



ab13573 (2µg/ml) staining of paraffin embedded Human Thymus. Steamed antigen retrieval with Tris/EDTA buffer pH 9, HRP-staining.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AIRE antibody - ChIP Grade (ab13573)

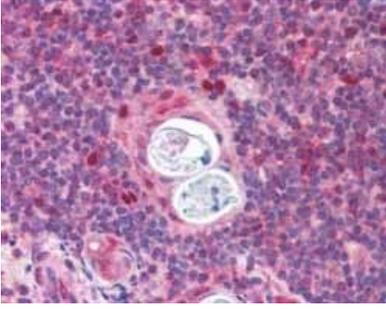


**All lanes** : Anti-AIRE antibody - ChIP Grade (ab13573) at 0.01 µg/ml

**Lane 1** : HEK293 cell lysate, untransfected

**Lane 2** : HEK293 cell lysate, transfected with human AIRE

Western blot - Anti-AIRE antibody - ChIP Grade (ab13573)



ab13573 at 2.5 µg/ml staining Human Thymus by IHC-P. Thymic medulla shows staining of select nuclei. Steamed antigen retrieval with citrate buffer pH6, AP-staining.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AIRE antibody - ChIP  
Grade (ab13573)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### **Our Abpromise to you: Quality guaranteed and expert technical support**

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors