



# AIRE-1 Polyclonal Antibody

|                           |   |
|---------------------------|---|
| <b>Catalog No</b>         | YP-Ab-01524   |
| <b>Isotype</b>            | IgG   |
| <b>Reactivity</b>         | Human;Rat;Mouse;  |
| <b>Applications</b>       | WB;ELISA  |
| <b>Gene Name</b>          | AIRE  |
| <b>Protein Name</b>       | Autoimmune regulator  |
| <b>Immunogen</b>          | The antiserum was produced against synthesized peptide derived from human AIRE. AA range:126-175  |
| <b>Specificity</b>        | AIRE-1 Polyclonal Antibody detects endogenous levels of AIRE-1 protein.   |
| <b>Formulation</b>        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.   |
| <b>Source</b>             | Polyclonal, Rabbit,IgG  |
| <b>Purification</b>       | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.   |
| <b>Dilution</b>           | Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.  |
| <b>Concentration</b>      | 1 mg/ml   |
| <b>Purity</b>             | ≥90%  |
| <b>Storage Stability</b>  | -20°C/1 year  |
| <b>Synonyms</b>           | AIRE; APECED; Autoimmune regulator; Autoimmune polyendocrinopathy candidiasis ectodermal dystrophy protein; APECED protein  |
| <b>Observed Band</b>      | 50kD  |
| <b>Cell Pathway</b>       | Nucleus . Cytoplasm . Predominantly nuclear but also cytoplasmic (PubMed:11274163, PubMed:14974083). Found in nuclear body-like structures (dots) and in a filamentous vimentin-like pattern (PubMed:11274163, PubMed:14974083, PubMed:26084028). Associated with tubular structures (PubMed:11274163, PubMed:14974083). .  |
| <b>Tissue Specificity</b> | 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. In secondary lymphoid organs, expressed in a discrete population of bone marrow-derived tolerogenic antigen presenting cells (APCs) called extrathymic AIRE expressing cells (eTAC)(at protein level) (PubMed:23993652). Isoform 2 and isoform 3 seem to be less frequently expressed than isoform 1, if at all. |
| <b>Function</b>           | 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

#### 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],

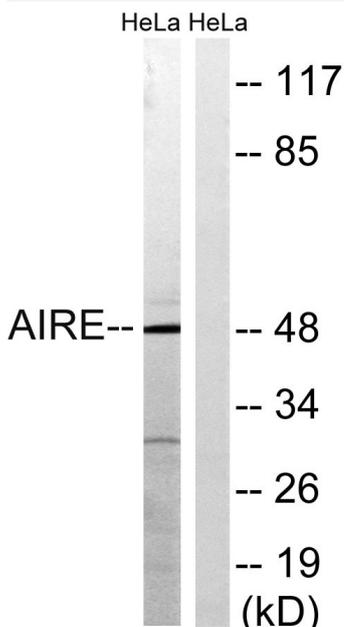
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western blot analysis of lysates from HeLa cells, treated with Hu 2nM 24h, using AIRE Antibody. The lane on the right is blocked with the synthesized peptide.