

## Product datasheet for **SC300116**

### AIRE (NM\_000658) Human Untagged Clone

#### Product data:

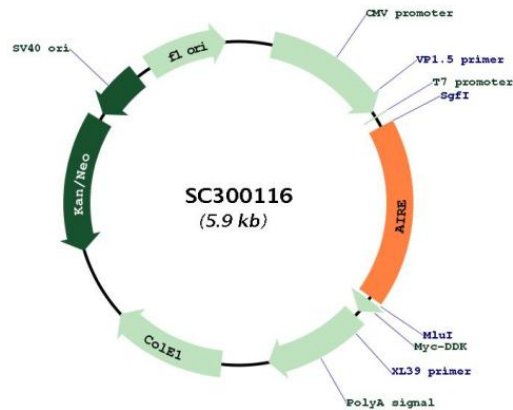
Product Type:	Expression Plasmids
Product Name:	AIRE (NM_000658) Human Untagged Clone
Tag:	Tag Free
Symbol:	AIRE
Synonyms:	AIRE1; APECED; APS1; APSI; PGA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC300116 representing NM_000658. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTGGTTGGTGTACAGTCCCGGGCCCTGGAACGCAGCAGCCTGCAAGAAACCGGTTTTCTTCCCA
ATAGGGATGGCCCGGGGGTGTCTGTTGGAGACCAGATGGATGGGAACAGGTGGTCAGGGCAGAATT
TCAGGCCCTGGCAGCATGGGAGCAGGGCAGAGACTGGGGAGTTCAGGTACCCAGAGATGCTGCTGGGGG
AGCTGTTTTGGGAAGGAGGTGGCTCTCAGGAGGGTGTGCACCCAGCCAGTCTGCATGGGCGTCTCT
TGCTGTGCCAGAAGAATGAGGACGAGTGTCCCGTGTGTCCGGACGGCGGGAGCTCATCTGCTGTGAC
GGCTGCCCTCGGGCCTTCCACCTGGCCTGCCTGTCCCCTCGCTCCGGGAGATCCCAGTGGGACCTGG
AGGTGCTCCAGCTGCCTGCAGGCAACAGTCCAGGAGGTGCAGCCCGGGCAGAGGAGCCCGGCCCCAG
GAGCCACCCGTGGAGACCCCGCTCCCCCGGGGCTTAGGTCGGCGGGAGAGGAGGTAAGAGGTCCACCT
GGGAACCCCTAGCCGGCATGGACACGACTCTTGTCTACAAGCACCTGCCGGCTCCGCTTCTGCAGCC
CCGCTGCCAGGGCTGGACTCCTCGGCCCTGCACCCCTACTGTGTGTGGTCTGAGGGTTCAGCAGAAC
CTGGCTCCTGGTGCCTGTGCGGGTGTGCGGAGATGGTACGGACGTGCTGCGGTGACTCACTGCGCC
GCTGCCTCCACTGGCGCTGCCACTTCCAGCCGGCACCTCCCGCCCGGGACGGGCTGCGCTGCAGA
TCCTGCTCAGGAGACGTGACCCAGCCCTGTGGAGGGGTGCTGGCCCCAGCCCCCGCCGCTGGCC
CCTGGCCTGCCAAGGATGACACTGCCAGTCACGAGCCGCTGTCACAGGGATGACCTGGAGTCCCTT
CTGAGCGAGCACACCTTCGATGGCATCTGCAGTGGGCCATCCAGAGCATGGCCCGTCCGGCGCCCCC
TTCCCTCCTGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: SgfI-MluI



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**Plasmid Map:**


**ACCN:** NM\_000658

**Insert Size:** 1047 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_000658.2](#)

**RefSeq Size:** 1963 bp

**RefSeq ORF:** 1047 bp

**Locus ID:** 326

<b>Cytogenetics:</b>	21q22.3
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Primary immunodeficiency, Ubiquitin mediated proteolysis
<b>MW:</b>	36.5 kDa
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (2) lacks several 5' coding segments and uses different sequence for its 5' UTR, compared to variant 1. The resulting protein (isoform 2) has a shorter and distinct N-terminus when it is compared to isoform 1.</p>