

Product datasheet for **RG213497**

AIRE (NM_000383) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AIRE (NM_000383) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AIRE
Synonyms:	AIRE1; APECED; APS1; APSI; PGA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG213497 representing NM_000383
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGACGGACGCGCGCTACGCCGGTCTCTGAGGCTGCACCGCACGGAGATCGCGGTGGCCGTGGACA
 GCGCCTTCCCCTGCTGCACGCGCTGGCTGACCACGACGTGGTCCCCGAGGACAAGTTTCAGGAGACGCT
 TCATCTGAAGGAAAAGGAGGGCTGCCCCAGGCCCTCCACGCCCTCCTGTCTGGCTGCTGACCCAGGAC
 TCCACAGCCATCCTGGACTTCTGGAGGGTGTGTTCAAGGACTACAACCTGGAGCGCTATGGCCGGCTGC
 AGCCCATCCTGGACAGCTTCCCAAAGATGTGGACCTCAGCCAGCCCCGGAAGGGGAGGAAGCCCCCGGC
 CGTCCCCAAGGCTTTGGTACCGCCACCCAGACTCCCCACCAAGAGGAAGGCCTCAGAAGAGGCTCGAGCT
 GCCGCGCCAGCAGCCCTGACTCCAAGGGGACCCGACCCAGGCTCTCAACTGAAGGCCAAGCCCCCA
 AGAAGCCGGAGAGCAGCGCAGAGCAGCAGCGCCTTCCACTCGGGAACGGGATTACAGACCATGTCAGTTC
 AGTCCAGAGAGCTGTGGCCATGTCTCCGGGGACGTCCCGGGAGCCCAGGGGCCGTGGAGGGGATCCTC
 ATCCAGCAGGTGTTTGTGTCAGGCGGCTCCAAGAAGTGCATCCAGGTTGGCGGGGAGTTCTACACTCCCA
 GCAAGTTCGAAGACTCCGGCAGTGGGAAGAACAAGGCCCGCAGCAGCAGTGGCCCCAAGCCCTCTGGTTTCG
 AGCCAAGGGAGCCAGGGCGCTGCCCCCGTGGAGGTGAGGCTAGGCTGGCCAGCAGGGCAGCGTTCCC
 GCCCTCTGGCCCTCCCCAGTGACCCCCAGCTCCACCAGAAGAATGAGGACGAGTGTGCCGTGTGTCGGG
 ACGGCGGGGAGCTCATCTGCTGTGACGGCTGCCCTCGGCCTTCCACTGGCCTGCCTGTCCCCTCCGCT
 CCGGGAGATCCCAGTGGGACCTGGAGGTGCTCCAGTGCCTGCAGGCAACAGTCCAGGAGGTGCAGCCC
 CGGGCAGAGGAGCCCCGGCCCCAGGAGCCACCCGTGGAGACCCCGCTCCCCCGGGGCTTAGTTCGGCGG
 GAGAGAGGTAAGAGGTCCACTGGGGAACCCCTAGCCGGCATGGACACGACTCTTGCTACAAGCACCT
 GCCGGCTCCGCCTTCTGCAGCCCCGCTGCCAGGCTGGACTCCTCGGCCCTGCACCCCTACTGTGTGTG
 GGTCTGAGGGTACAGAGAACCTGGCTCCTGGTGCAGCTTGGGGGTGTGCGGAGATGGTACGGACGTGC
 TGCGGTGTACTACTGCGCCGCTGCCTTCCACTGGCGCTGCCACTTCCCAGCCGGCACCTCCCGGCCGG
 GACGGGCTGCGCTGCAGATCCTGCTCAGGAGACGTGACCCAGCCCTGTGGAGGGGTGCTGGCCCCC
 AGCCCCGCCCGCTGGCCCTGGGCTGCCAAGGATGACTGCCAGTACAGAGCCCGCTCTGCACAGGG
 ATGACCTGGAGTCCCTTCTGAGCGAGCACACTTCGATGGCATCTGCAGTGGGCCATCCAGAGCATGGC
 CCGTCCGGCGGCCCTTCCCCTCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

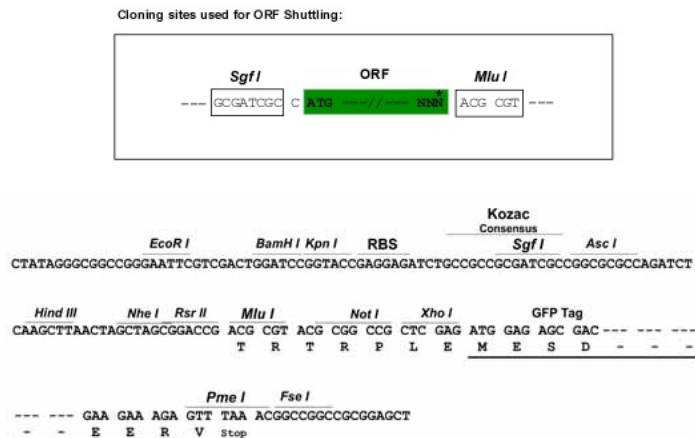
>RG213497 representing NM_000383
 Red=Cloning site Green=Tags(s)

MATDAALRRLRLHRTEIAVAVDSAPLLHALADHDVVPEDKFQETLHLKEKEGCPQAFHALLSWLLTQD
 STAILDFWRVLFKDYNLERYGRQLPILDSFPKVDL SQPRKGRKPPAVPKALVPPPRLPTKRKASEEARA
 AAPAALTPRGTASPGSQLKAKPPKPESSAEQRLPLGNGIQTMSASVQRAVAMSSGDVPGARGAVEGIL
 IQQVFESGGSKKCIQVGGEFYTPSKFEDSGSGKNKARSSGPKPLVRAKGAQGAAPGGGEARLGQQGSVP
 APLALPSDPQLHQKNEDECAVCRDGGELICCDGCPRAFHACLSPPLREIPSGTWRCSSCLQATVQEVQP
 RAEEPRPQEPVETPLPPGLRSAGEEVRGPPGEPLAGMDTTLVYKHL PAPPSAAPLPLDSSALHPLL CV
 GPEGQQLAPGARCGVCGDGTDLRCTHCAAHFHWRCHFPAAGT SRPGTGLRCRSCSGDVTPAPVEGLAP
 SPARLAPGPAKDDTASHEPALHRDDLESLLSEHTFDGILQWAIQSMARPAAPFPS

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_000383

ORF Size: 1635 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_000383.4](#)

RefSeq Size: 2252 bp

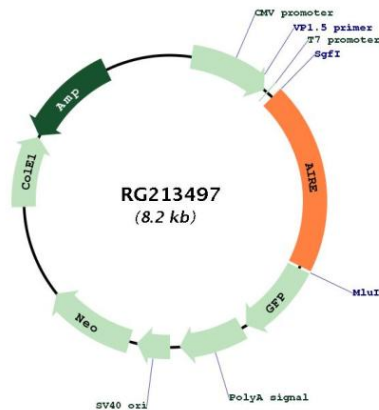
RefSeq ORF: 1638 bp

Locus ID: 326

UniProt ID: [O43918](#)

Cytogenetics:	21q22.3
Protein Families:	Druggable Genome
Protein Pathways:	Primary immunodeficiency, Ubiquitin mediated proteolysis
Gene Summary:	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]

Product images:



Circular map for RG213497