

Product datasheet for **RG202949**

AICDA (NM_020661) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: AICDA (NM_020661) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: AICDA
Synonyms: AID; ARP2; CDA2; HEL-S-284; HIGM2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG202949 representing NM_020661
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACAGCCTTTGATGAACCGGAGGAAGTTTCTTTACCAATTCAAAAATGTCCGCTGGGCTAAGGGTC
GGCGTGAGACCTACCTGTGCTACGTAGTGAAGAGGCGTGACAGTGCTACATCCTTTTCACTGGACTTTGG
TTATCTTCGCAATAAGAACGGCTGCCACGTGGAATTGCTCTTCTCCGCTACATCTCGGACTGGGACCTA
GACCTGGCCGCTGCTACCGGTCACCTGGTTCACCTCCTGGAGCCCTGCTACGACTGTGCCGACATG
TGCCGACTTTCTGCGAGGGAACCCCACTCAGTCTGAGGATCTCACCGCGCGCTCTACTTCTGTGA
GGACCGCAAGGCTGAGCCGAGGGGCTGCGGCGGCTGCACGCGCGGGGTGCAAATAGCCATCATGACC
TTCAAAGATTATTTTACTGCTGGAATACTTTTGTAGAAAACCATGAAAGAATTTCAAAGCCTGGGAAG
GGCTGCATGAAAATTCAGTTCGCTCTCCAGACAGCTTCGGCGCATCCTTTTGCCCTGTATGAGTTGA
TGACTTACGAGACGCATTTCTGACTTTGGGACTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG202949 representing NM_020661
Red=Cloning site Green=Tags(s)

MDSLLMNRKFLYQFKNVRWAKGRRETYLCYVVKRRDSATSFSLDFGYLRNKNKGHVLLFLRYISDWDL
DPGRCYRVTWFTSWSPCYDCARHVADFLRGNPNLSLRIFARLYFCEDRKAEPGLRRLHRAGVQIAIMT
FKDYFYCWNTFVENHERTFKAWEGLHENSVRLSRQLRRILLPLYEVDLRLDAFRTLGL

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



Cloning Scheme:


ACCN: NM_020661

ORF Size: 594 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_020661.1](#), [NP_065712.1](#)

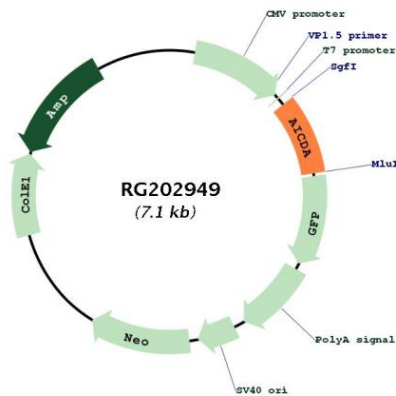
RefSeq Size: 2791 bp

RefSeq ORF: 597 bp

Locus ID: 57379

UniProt ID: [Q9GZX7](#)
Cytogenetics: 12p13.31
Protein Families: Druggable Genome
Protein Pathways: Primary immunodeficiency
Gene Summary: This gene encodes a RNA-editing deaminase that is a member of the cytidine deaminase family. AICDA is specifically expressed and active in germinal center-like B cells. In the germinal center, AICDA is involved in somatic hypermutation, gene conversion, and class-switch recombination of immunoglobulin genes. An epigenetic role in neoplastic transformation and lymphoma progression has been experimentally ascribed to AICDA using mouse models. Defects in this gene are the cause of autosomal recessive hyper-IgM immunodeficiency syndrome type 2 (HIGM2). [provided by RefSeq, Jul 2020]

Product images:



Circular map for RG202949