

## Product datasheet for **RG238728**

### **AER61 (EOGT) (NM\_001278689) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	AER61 (EOGT) (NM_001278689) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AER61
Synonyms:	AER61; AOS4; C3orf64; EOGT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG238728 representing NM\_001278689.  
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGTTAATGTTGTTTGTCTTTGGAGTCTTACTTCATGAAGTCTCACTGAGTGGTCAGAATGAAGCTCCT
CCTAATACTCACAGCATTCCAGGCGAACCTCTGTATAACTATGCCAGCATCCGCTTGCCAGAGGAGCAC
ATTCCCTTCTTTTTGCACAACAATAGGCATATTGCCACTGTCTGTAGGAAAGACTCTTTTGTCCATAT
AAGAAACACCTAGAGAAGCTAAAGTACTGCTGGGTTATGAGAAATCCTGCAAACAGAGTTCAGGTTT
GGTTACCCAGTTTGCAGCTATGTCGACATGGGATGGACGGACACTCTTGAGTCACTGAGGACATATTT
TGGAAACAAGCTGACTTTGGATATGCCAGAGAGAGGCTGGAGGAGATGCATGTGCTCTGTCAGCCTAAG
GAAACGAGTGACTCAAGTCTGGTGTGTTCCGTTATCTTCAGTACTGCAGAGCAACCAATCTCTATCTT
GATTTAAGAAACATCAAGAGAAATCATGACAGATTTAAGGAGGACTTTTTCCAGAGTGGTAAATGGGA
GGGCATGTAACTTGACATCCGTACATTGACGTCTGAAGGTGAGCGCAAAGCCCTCTGCAGTCATGG
TTTGCTGAGCTACAAAGCTATACTCAGCTCAACTTCAGACCTATAGAAGATGCTAAATGTGACATTGTC
ATTGAAAACCAACATATTTTCATGAAATAGATGCAGGTGTTAATCATGTATCACCCTTCTGTGATTTTC
ATCAATCTTTATATTACTCAGCACGTTAATAACTCATTCACTGACTGACGTGTACATCGTGATGTGGGAC
ACCAGTCTTACGGATATGGTGACCTATTCTCCGACACATGGAATGCATTTACTGATTATGACGTTATA
CATTTGAAAACCTTATGATTCAAAAGGGTATGTTTTAAGAAGCTGTTTTTTCATTACTCCCCCGCATG
AGGTATGGGCTGTTCTATAATACTCCTCTGATATCTGGCTGTCAAATACTGGACTATTCAGGGCATT
GCCAGCATGACTACACAGACTAAACATCACACAAGAAGGACCTAAGGATGGAAAAATTCGAGTCACC
ATTCTTGCACGGAGCACAGAATACCGGAAAATCCTTAACCAAAATGAGCTTGTAAATGCACTGAAAAACA
GTATCTACATTTGAAGTCCAGATTGTTGATTACAAGTATAGAGAACTTGGGTTTTTAGATCAACTAAGG
ATCACACACAACACGGACATATTTATTGGAATGCATGGAGCTGGTCTGACCCATTTACTTTTCTTCCA
GACTGGGCTGCTGATTTGAACTGTACAAGTGAAGATGAACGCTGTTACTTAGACTTGGCCAGGCTG
AGAGGCGTTCACTACATCACTTGGCGACGGCAGAACAAAGTCTTTCCTCAGGATAAGGGCCACCATCCA
ACCCTGGGGGAGCACCCGAAGTTCACCAACTACTCTTTCGATGTAGAAGAATTTATGTATCTTGCCTT
CAGGCTGCAGACCACGTATTGCAACACCCAAAGTGCCATTTAAGAAGAAACATGATGAGCTA
ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAAAC
```

**Protein Sequence:**

>Peptide sequence encoded by RG238728  
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MLMLFVFGVLLHEVSLSGQNEAPPNTHSIPGEPLVNYASIRLPEEHIPFFLHNNRHIATVCRKDSLCPY
KKHLEKLYCWGYEKSKPEFRFGYPVCSYVDMGWDTLESAEDIFWKQADFGYARERLEEMHVLCPK
ETSDSSLVCSRYLQYCRATNLYDLRNIRKRNHDFKEDFFQSGEIGGHCKLDIRTLTSEGQRKSPLQSW
FAELQSYTQLNFRPIEDAKCDIVIEKPTYFMKLDAGVNMVYHHFCDFINLYITQHVNNSFSTDVYIVMWD
TSSYGYGDLFSDTWNAFTDYDVIHLKTYDSKRVCFKEAVFSLPRMRYGLFYNTPLISGCQNTGLFRAF
AQHVLHRLNITQEGPKDGKIRVTILARSTEYRKILNQNELVNALKTVSTFEVQIVDYKYRELGFLDQLR
ITHNTDIFIGMHGAGLTHLLFLPDWAAVFELYNCEDERCYLDLRLRGVHYITWRRQNKVFPQDKGHH
TLGEHPKFTNYSFVVEEFMYLVLQAADHVLQHPKWPFKKKHDEL
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001278689

**ORF Size:** 1581 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).

**RefSeq:** [NM\\_001278689.2](#)

**RefSeq Size:** 4666 bp

**RefSeq ORF:** 1584 bp

**Locus ID:** 285203

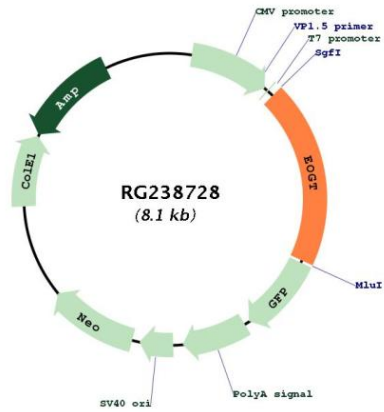
**UniProt ID:** [Q5NDL2](#)

**Cytogenetics:** 3p14.1

**MW:** 62.5 kDa

**Gene Summary:** This gene encodes an enzyme that acts in the lumen of the endoplasmic reticulum to catalyze the transfer of N-acetylglucosamine to serine or threonine residues of extracellular-targeted proteins. This enzyme modifies proteins containing eukaryotic growth factor (EGF)-like domains, including the Notch receptor, thereby regulating developmental signalling. Mutations in this gene have been observed in individuals with Adams-Oliver syndrome 4. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2015]

Product images:



Circular map for RG238728