

Product datasheet for **RG235915**

OAZ1 (NM_001301020) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: OAZ1 (NM_001301020) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: OAZ1
Synonyms: AZ1; AZI; OAZ
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG235915 representing NM_001301020.
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGTGAATCCTCCCTGCAGCGGATCCTCAATAGCCACTGCTTCGCCAGAGAGAAGGAAGGGGATAAA
CCCAGCGCCACCATCCACGCCAGCCGACCATGCCGCTCCTAAGCCTGCACAGCCGCGCGGCAGCAGC
AGTGAGAGGGTCTCCCTCCACTGCTGTAGTAACCCGGGTCGGGGGCTCGGTGGTCTCCATGGTAAA
TCCTCCCTGCAGCGGATCCTCAATAGCCACTGCTTCGCCAGAGAGAAGGAAGGGGATAAACCAGCGCC
ACCATCCAGCCAGCCGACCATGCCGCTCCTAAGCCTGCACAGCCGCGCGGCAGCAGCAGTGAGAGG
GTCTCCCTCCACTGCTGTAGTAACCCGGGTCGGGGGCTCGGTGGTGTCTC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG235915
Blue=ORF Red=Cloning site Green=Tag(s)

```
MVKSSLQRILNSHCFAREKEGDKPSATIHASRTMPLLSLHSRGGSSSERVSLHCCSNPGPGRWCSMVK
SSLQRILNSHCFAREKEGDKPSATIHASRTMPLLSLHSRGGSSSERVSLHCCSNPGPGRWCS
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_001301020

ORF Size: 396 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_001301020](#), [NP_001287949](#)

RefSeq Size: 1189 bp

RefSeq ORF: 682 bp

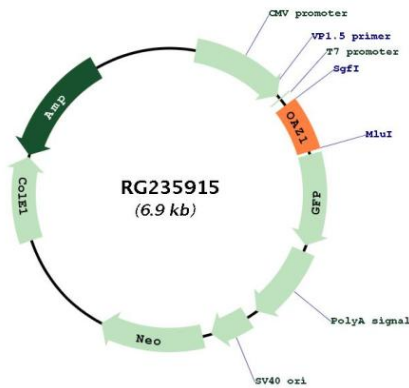
Locus ID: 4946

Cytogenetics: 19p13.3

MW: 14.8 kDa

Gene Summary:

The protein encoded by this gene belongs to the ornithine decarboxylase antizyme family, which plays a role in cell growth and proliferation by regulating intracellular polyamine levels. Expression of antizymes requires +1 ribosomal frameshifting, which is enhanced by high levels of polyamines. Antizymes in turn bind to and inhibit ornithine decarboxylase (ODC), the key enzyme in polyamine biosynthesis; thus, completing the auto-regulatory circuit. This gene encodes antizyme 1, the first member of the antizyme family, that has broad tissue distribution, and negatively regulates intracellular polyamine levels by binding to and targeting ODC for degradation, as well as inhibiting polyamine uptake. Antizyme 1 mRNA contains two potential in-frame AUGs; and studies in rat suggest that alternative use of the two translation initiation sites results in N-terminally distinct protein isoforms with different subcellular localization. Alternatively spliced transcript variants have also been noted for this gene. [provided by RefSeq, Dec 2014]

Product images:


Circular map for RG235915