

Product datasheet for **RG235429**

OAZ2 (NM_001301302) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: OAZ2 (NM_001301302) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: OAZ2
Synonyms: AZ2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG235429 representing NM_001301302.
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGATAAACACCCAGGACAGTATTTTGCCTTTGAGTAACTGTCCCAGCTCCAGTGCTGCAGGCACATT
GTTCCAGGGCCTCTGTGGTGCTCCATGATAAACACCCAGGACAGTATTTTGCCTTTGAGTAACTGTCCC
CAGCTCCAGTGCTGCAGGCACATTGTTCCAGGGCCTCTGTGGTGCTCC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG235429
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MINTQDSILPLSNCPQLQCCRHI VPGPLWCSMINTQDSILPLSNCPQLQCCRHI VPGPLWCS
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYP SGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLGSFTRTFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites: SgfI-MluI



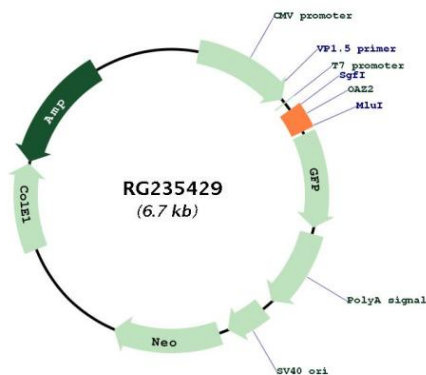
[View online »](#)

Cloning Scheme:


ACCN:	NM_001301302
ORF Size:	186 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_001301302 , NP_001288231
RefSeq Size:	1944 bp
RefSeq ORF:	568 bp
Locus ID:	4947
Cytogenetics:	15q22.31
MW:	7.4 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 polyamines. 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 2, the second member of the antizyme family. Like antizyme 1, antizyme 2 has broad tissue distribution, inhibits ODC activity and polyamine uptake, and stimulates ODC degradation in vivo; however, it fails to promote ODC degradation in vitro. Antizyme 2 is expressed at lower levels than antizyme 1, but is evolutionary more conserved, suggesting it likely has an important biological role. Studies also show different subcellular localization of antizymes 1 and 2, indicating specific function for each antizyme in discrete compartments of the cell. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Dec 2014]

Product images:


Circular map for RG235429