

Product datasheet for RG226499

OAZ3 (NM_001134939) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: OAZ3 (NM_001134939) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: OAZ3

Synonyms: AZ3; OAZ-t; TISP15

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG226499 representing NM_001134939
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGACCGTGCCCTGGCGGCCAGGAAAGCGACGCATCACTTATAAGGAAGAGGAGGACTTGACACTCCAGC CCCGTTCCTGCCTCCAGTGCTCCTGAGTCCCTAGTAGGCCTCCAGGAGGGCAAAAGCACCGAGCAGGGTA ACCACGACCAGCTTAAAGAACTGTATTCGGCTGGGAACTTGACGGTGCTACTGACCCCCTGCTCCA CCAGGACCCAGTACAGTTAGACTTTCACTTCCGCCTTACCTCCCAGACCTCTGCCCATTGGCACGGCCTT CTCTGTGACCGTCGACTCTTCCTGGATATCCCATATCAGGCCTTGGATCAAGGCAACCGGGAAAGTTTGA CTGCAACCCTGGAGTACGTGGAAGAAGAAAATGTGGACTCTGTGTTTGTGAACTTCCAGAATGATCG GAACGACAGAGGGTGCCCTGCGGGGCCTTCAGCTACATGGGCTTTGAGGTGGTCAGACCAGATCACCCT GCCCTCCCTTCGCTTGGACAATGTCATCTTTATGGTGTATCCCCTTGAAAGGGATGTTGGCCACCTGCCCA

GTGAGCCTCCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Restriction Sites: Sgfl-Mlul



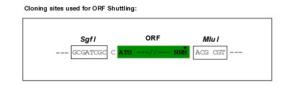
OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

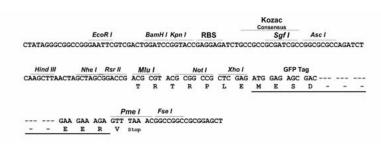
CN: techsupport@origene.cn

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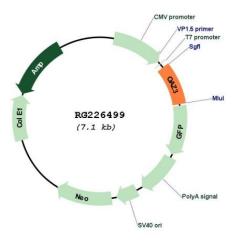


Cloning Scheme:





Plasmid Map:



ACCN: NM_001134939

ORF Size: 183 bp

OAZ3 (NM_001134939) Human Tagged ORF Clone - RG226499

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: <u>NM 001134939.1</u>, <u>NP 001128411.1</u>

RefSeq Size: 866 bp
RefSeq ORF: 574 bp
Locus ID: 51686
UniProt ID: Q9UMX2
Cytogenetics: 1q21.3

Gene Summary: The protein encoded by this gene belongs to the ornithine decarboxylase antizyme family,

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 3, the third member of the antizyme family. Like antizymes 1 and 2, antizyme 3 inhibits ODC activity and polyamine uptake; however, it does not stimulate ODC degradation. Also, while antizymes 1 and 2 have broad tissue distribution, expression of

which plays a role in cell growth and proliferation by regulating intracellular polyamine levels.

antizyme 3 is restricted to haploid germ cells in testis, suggesting a distinct role for this antizyme in spermiogenesis. Antizyme 3 gene knockout studies showed that homozygous mutant male mice were infertile, and indicated the likely role of this antizyme in the formation of a rigid connection between the sperm head and tail during spermatogenesis. Alternatively spliced transcript variants encoding different isoforms, including one resulting from the use of non-AUG (CUG) translation initiation codon, have been found for this gene. [provided by

RefSeq, Dec 2014]