

Product datasheet for **SC333323**

OAZ2 (NM_001301302) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: OAZ2 (NM_001301302) Human Untagged Clone
Tag: Tag Free
Symbol: OAZ2
Synonyms: AZ2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Fully Sequenced ORF: >SC333323 representing NM_001301302.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

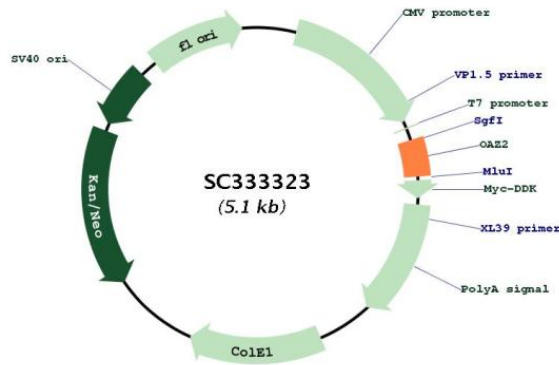
```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGATCGCC
ATGATAAACACCCAGGACAGTATTTTGCCTTTGAGTAACTGTCCCAGCTCCAGTGCTGCAGGCACATT
GTTCCAGGGCCTCTGTGGTGCTCCATGATAAACACCCAGGACAGTATTTTGCCTTTGAGTAACTGTCCC
CAGCTCCAGTGCTGCAGGCACATTGTTCCAGGGCCTCTGTGGTGCTCC
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: Sgfl-Mlul



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Plasmid Map:



ACCN: NM_001301302

Insert Size: 186 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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: [NM_001301302.1](#)

RefSeq Size: 1944 bp

RefSeq ORF: 186 bp

Locus ID: 4947

Cytogenetics: 15q22.31

MW: 6.9 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]

Transcript Variant: This variant (2) uses an alternate, in-frame acceptor splice site at the second exon compared to variant 1. The resulting isoform (2) is one amino acid shorter than isoform 1.