

Product datasheet for **RN215867**

Oaz1 (NM_001301048) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Oaz1 (NM_001301048) Rat Untagged Clone

Tag: Tag Free

Symbol: Oaz1

Synonyms: Oaz; ODC-Az; ODCAC

Mammalian Cell Selection: Neomycin

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >RN215867 representing NM_001301048
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGAAATCCTCCCTGCAGCGGATCCTCAACAGCCACTGCTTCGCCAGAGAGAAAGAAGGGGACAAAC
GCAGCGCCACGCTTCACGCCAGCCGCACCATGCCGCTTCTTAGTCAGCACAGCCGCGGGCTGCAGCAG
CGAGAGGGTTGCCCTTCATTGCTGTAGTAACCTGGTCCGGGGCCTCGGTGGTCTCCATGGTGAAATCC
TCCCTGCAGCGGATCCTCAACAGCCACTGCTTCGCCAGAGAGAAAGAAGGGGACAAACGCAGCGCCACGC
TTCACGCCAGCCGCACCATGCCGCTTCTTAGTCAGCACAGCCGCGGGCTGCAGCAGCAGAGGGTTGC
CCTTCATTGCTGTAGTAACCTGGTCCGGGGCCTCGGTGGTCTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-MluI

ACCN: NM_001301048

Insert Size: 396 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).



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OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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:	<ol style="list-style-type: none"> 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_001301048.1, NP_001287977.1</u>
RefSeq Size:	1061 bp
RefSeq ORF:	679 bp
Locus ID:	25502
Cytogenetics:	7q11
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) uses an alternate, in-frame acceptor splice site at the second exon compared to variant 1. The resulting isoform (3) lacks 2 internal amino acids compared to isoform 1.</p>