

Product datasheet for **RN215944**

Oaz3 (NM_001101018) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Oaz3 (NM_001101018) Rat Untagged Clone
Tag: Tag Free
Symbol: Oaz3
Synonyms: Az3; Oaz-t; ODC-Az 3
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN215944 representing NM_001101018
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

CTGCCTTGTACCAGGTCCCGCCCTCTCTACTCCCTTTCTTATATTAAGAGGGGAAAAACACGGAAC
GCCTTACCCATTCTGGTCACCATACGCCTATTACCTCTACTGTTACAAATACCGGATCACCTCCGGGA
GAAGATGCTGCCTTGTGTTACAGAAGCATCACTTACAAGGAACAGGAGGACCTGACTCTCCGGCCCCAT
TGCTGCCTCCCGTCTCCTGCCTCCCGTACTCCTGCCTCCCGTGCTCCCTGCCTGTACCAGGTCCCGCC
CCTCTCTACTCCCTTTCTTATATTAAGAGGGGAAAAACACGGAACGCCTTACCCATTCTGGTCACC
ATACGCCTATTACCTCTACTGTTACAAATACCGGATCACCTCCGGGAGAAGATGCTGCCTGTTGTTAC
AGAAGCATCACTTACAAGGAACAGGAGGACCTGACTCTCCGGCCCCATTGCTGCCTCCCGTGCTCCTGCC
TCCCGTACTCCTGCCTCCCGTGCTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001101018
Insert Size: 516 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_001101018.1</u> , <u>NP_001094488.1</u>
RefSeq Size:	878 bp
RefSeq ORF:	733 bp
Locus ID:	689588
Cytogenetics:	2q34
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 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 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. This transcript initiates translation from a non-AUG (CUG) codon that is highly conserved among the antizyme 3 orthologs. [provided by RefSeq, Dec 2014]</p>