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Product datasheet for RR215944

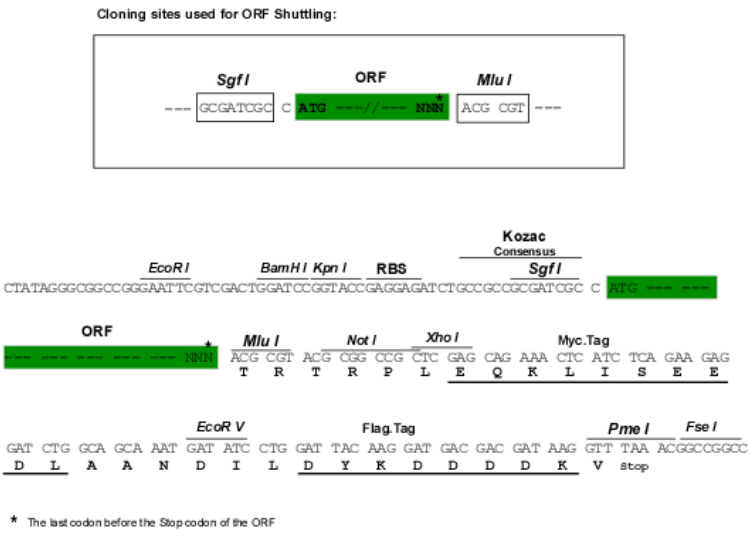
Oaz3 (NM_001101018) Rat Tagged ORF Clone

Product data:

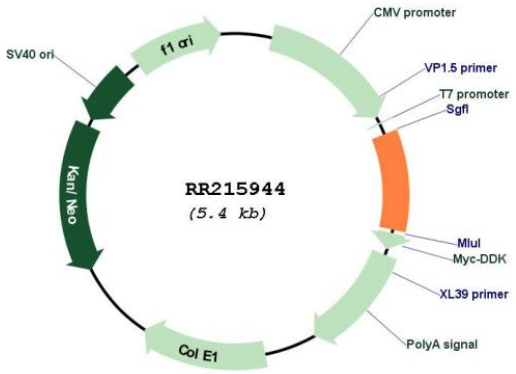
Product Type:	Expression Plasmids
Product Name:	Oaz3 (NM_001101018) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Oaz3
Synonyms:	Az3; Oaz-t; ODC-Az 3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR215944 representing NM_001101018 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC CTGCCTTGTACCAGGTCCCGCCCCTCTCTCTACTCCCTTTCTTATATTAAGAGGGGAAAAACACGGAACT GCCTCTACCCATTCTGGTCACCATACGCCTATTACCTCTACTGTTACAAATACCGGATCACCCTCCGGGA GAAGATGCTGCCTTGTTGTTACAGAAGCATCACTTACAAGGAACAGGAGGACCTGACTCTCCGGCCCCAT TGCTGCCTCCCGTGCTCCTGCCTCCCGTACTCCTGCCTCCCGTGCTCCCTGCCTTGTACCAGGTCCCGCC CCTCTCTCTACTCCCTTTCTTATATTAAGAGGGGAAAAACACGGAACTGCCTCTACCCATTCTGGTCACC ATACGCCTATTACCTCTACTGTTACAAATACCGGATCACCCTCCGGGAGAAGATGCTGCCTTGTTGTTAC AGAAGCATCACTTACAAGGAACAGGAGGACCTGACTCTCCGGCCCCATTGCTGCCTCCCGTGCTCCTGCC TCCCGTACTCCTGCCTCCCGTGCTCC ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Protein Sequence:	>RR215944 representing NM_001101018 Red=Cloning site Green=Tags(s) LPCTRSRPSLYSLSYIKRGKTRNCLYPFWSPYAYYLYCYKYRITLREKMLPCCYRSITYKEQEDLTLRPH CCLPCSCLPYSCLPCSLPCTRSRPSLYSLSYIKRGKTRNCLYPFWSPYAYYLYCYKYRITLREKMLPCCY RSITYKEQEDLTLRPHCCLPCSCLPYSCLPCS TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Restriction Sites:	SgfI-MluI

View online »

Cloning Scheme:



Plasmid Map:



ACCN: NM_001101018

ORF Size: 513 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).
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_001101018.1, NP_001094488.1
RefSeq Size:	878 bp
RefSeq ORF:	733 bp
Locus ID:	689588
Cytogenetics:	2q34
MW:	20.7 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 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]