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Product datasheet for RC235915

OAZ1 (NM_001301020) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: OAZ1 (NM_001301020) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: OAZ1

Synonyms: AZ1; AZI; OAZ

Vector: pCMV6-Entry (PS100001)

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

Cell Selection: Neomycin

ORF Nucleotide Sequence:

>RC235915 representing NM_001301020
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGAAATCCTCCCTGCAGCGGATCCTCAATAGCCACTGCTTCGCCAGAGAGAAGGAAGGGGATAAAC
CCAGCGCCACCATCCACGCCAGCCGCACCATGCCGCTCCTAAGCCTGCACAGCCGCGGCGGCAGCAGCAG
TGAGAGGGTCTCCCTCCACTGCTGTAGTAACCCGGGTCCGGGGCCTCGGTGGTGCTCCATGGTGAAATCC
TCCCTGCAGCGGATCCTCAATAGCCACTGCTTCGCCAGAGAGAAGGAAGGGGATAAACCCAGCGCCACCA
TCCACGCCAGCCGCACCATGCCGCTCCTAAGCCTGCACAGCCGCGGCGGCAGCAGCAGTGAGAGGGTCTC
CCTCCACTGCTGTAGTAACCCGGGTCCGGGGCCTCGGTGGTGCTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC235915 representing NM_001301020
Red=Cloning site Green=Tags(s)

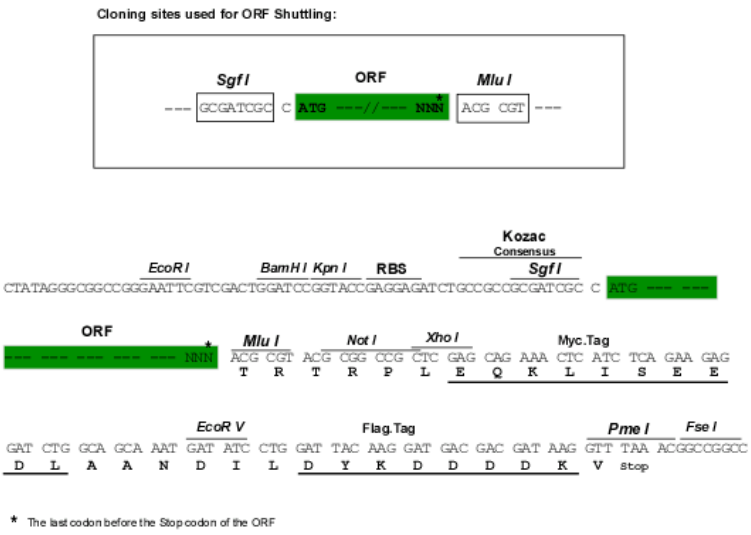
MVKSSLQRILNSHCFAREKEGDKPSATIHASRTMPLLSLHSRGGSSSERVSLHCCSNPGPGPRWCSMVKS
SLQRILNSHCFAREKEGDKPSATIHASRTMPLLSLHSRGGSSSERVSLHCCSNPGPGPRWCS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

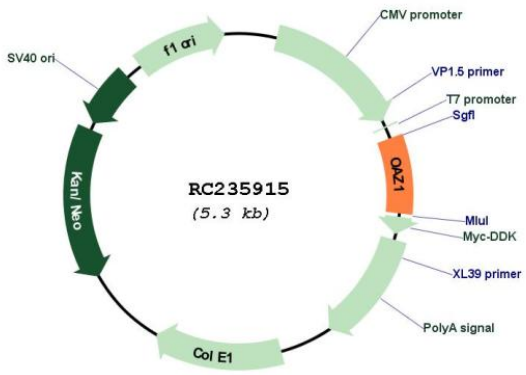
Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



Plasmid Map:



ACCN: NM_001301020

ORF Size: 396 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_001301020, NP_001287949
RefSeq Size:	1189 bp
RefSeq ORF:	682 bp
Locus ID:	4946
Cytogenetics:	19p13.3
MW:	14.8 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 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]