

## Product datasheet for **SC310697**

### OAZ3 (NM\_016178) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	OAZ3 (NM_016178) Human Untagged Clone
Tag:	Tag Free
Symbol:	OAZ3
Synonyms:	AZ3; OAZ-t; TISP15
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_016178, the custom clone sequence may differ by one or more nucleotides

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CTGCCTTGTAAGAGGTGTCGCCCTCTGTCTACTCCCTTTCTTATATCAAGAGGGGAAAAACACGTAAC  
ACCTCTACCCGATCTGGTCACCATACGCCTATTACCTTTACTGTTACAAGTACCGGATCACTCTCCGGGA  
GAAGATGCTGCCTCGTTGTTATAAAAGCATCACTTATAAGGAAGAGGAGGACTTGACACTCCAGCCCGT  
TCCTGCCTCCAGTCTCCTGCCTTGTAAAGAGGTGTCGCCCTCTGTCTACTCCCTTTCTTATATCAAGA  
GGGAAAAACACGTAACCTCTACCCGATCTGGTCACCATACGCCTATTACCTTTACTGTTACAAGTA  
CCGGATCACTCTCCGGGAGAAGATGCTGCCTCGTTGTTATAAAAGCATCACTTATAAGGAAGAGGAGGAC  
TTGACACTCCAGCCCGTTCCTGCCTCCAGTGCTCC
```

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_016178
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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.



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<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_016178.2</a></u> , <u><a href="#">NP_057262.2</a></u>
<b>RefSeq Size:</b>	901 bp
<b>RefSeq ORF:</b>	456 bp
<b>Locus ID:</b>	51686
<b>UniProt ID:</b>	<u><a href="#">Q9UMX2</a></u>
<b>Cytogenetics:</b>	1q21.3
<b>Gene Summary:</b>	<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. Alternatively spliced transcript variants encoding different isoforms, including one resulting from the use of non-AUG (CUG) translation initiation codon, have been found for this gene. [provided by RefSeq, Dec 2014]</p> <p>Transcript Variant: This variant (1) initiates translation from a non-AUG (CUG) start codon, and encodes the longest isoform (1).</p>