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# Product datasheet for RC229129L4V

## OAZ3 (NM_016178) Human Tagged ORF Clone Lentiviral Particle

### Product data:

| | |
|---|---|
| **Product Type:** | Lentiviral Particles |
| **Product Name:** | OAZ3 (NM_016178) Human Tagged ORF Clone Lentiviral Particle |
| **Symbol:** | OAZ3 |
| **Synonyms:** | AZ3; OAZ-t; TISP15 |
| **Mammalian Cell Selection:** | Puromycin |
| **Vector:** | pLenti-C-mGFP-P2A-Puro (PS100093) |
| **Tag:** | mGFP |
| **ACCN:** | NM_016178 |
| **ORF Size:** | 1538 bp |
| **ORF Nucleotide Sequence:** | The ORF insert of this clone is exactly the same as(RC229129). |
| **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. |
| **RefSeq:** | NM_016178.2, NP_057262.2 |
| **RefSeq ORF:** | 709 bp |
| **Locus ID:** | 51686 |
| **UniProt ID:** | Q9UMX2 |
| **Cytogenetics:** | 1q21.3 |
| **MW:** | 27.2 kDa |

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**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. 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]