

Product datasheet for **MC205517**

Azin1 (NM_018745) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Azin1 (NM_018745) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Azin1
Synonyms:	1700085L02Rik; AZI; O; Oazi; Oazin
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >BC019412
 GGCTCAACTCTCGCCGCGGTGTTTCCGTTTTCTCTCTGGTTGTCTCCTGCTCTGCTCTTCTCATCCTTC
 TCGCTCTGCTGCTCTGCGGAGTGACGAGGCTGAATCCTCTCCCCACCCAGTTGCGCCTTTCTTCTTTT
 CTCGCGCCGCTCCATTTCTCAGTTCGGCTGCCGCCCACTGCTGCTCAGCTGGTGTGGTGCCGCGCG
 TTTCCCCACGTCGTCCCCGAGCCTATGGCCAGGCCCTTGGGTATTTCTGCTCAAGGTAACCACAT
 CCCTCTTTAAAAATTCCGCCGAAAAAGAGAAGACGCTTTACCCGACTCTTGGGCCGTTATCTCACGGCG
 AACTTTTGACCGAGTATACAACCTACCCAGAAGGCCTAGGAGAAGTGCTGTATAGAGAGCAGTTCGACTT
 CAACGCTGAGCCACCTTGGGAACCTAGCTGATGATAGGGGTTCCATCTCCTAAGTTGTCCATTTTGTG
 CATATTCTAAGGACCCAGACATAGGCTTGGTGGCCGCTCTTGTTTTTCTGGTTTATGACTTTCGGCT
 TTGTGGAATACGGCTGAGATGAAAGGATTTATTGACGATGCGAACTACTCCGTTGGCCTGTTGGATGAAG
 GAACAAACCTTGGAAATGTTATTGATAACTATGTTTATGAACATACCCTGACAGAGAAAAATGCATTTT
 TGTGGGGGATCTTGGGAAGATCGTGAAGAAGCACAGTCAAGTGGCAGACCGTGGTGGCTCAGATAAAGCCG
 TTTTACACGGTGAAGTCAACTCCACTCCAGCCGTGCTTGGATCTTGGCAGCTCTTGGAACTGGGTTT
 CTTGTTCCAGCAAAAATGAAATGGCTTTAGTGAAGAATTGGGTGTATCTCCAGAAAACATCATTTTCCAC
 AAGTCCTTGAAGCAAGTGTCTCAGATAAAGTATGCAGCAAAAGTTGGAGTAAATATTATGACATGTGAC
 AATGAGATTGAATTAAGAAAAATTGCAAGGAATCACCCAAATGCCAAGGCTTACTACATATTGCAACAG
 AAGATAATATTGGAGGTGAAGATGGTAACATGAAGTTTGGCACTACACTGAAGAATTGTAGGCATCTTTT
 GGAATGTGCCAAGGAACTTGATGTCCAAATAATTGGGGTTAAATTTTCAAGTGCTTGCAAAAGAA
 TATCAAGTATATGTACATGCCCTGTCTGATGCTCGATGTGTGTTGACATGGCTGGAGAGTTTGGCTTTA
 CAATGAACATGTTAGACATCGGTGGAGGCTTACAGGAACTGAAATTCAGTTGGAAGAGGTTAATCATGT
 TATCAGTCCTCTGTTGGATTTACTTCCCTGAAGGATCTGGCATTGAGATAATTCAGAACCTGGAAGC
 TACTATGATCTTCTGCGTTTACACTTGCAGTCAATATTATTGCTAAGAAAGTTGTTGAAAATGATAAAT
 TTTCTCTGGAGTAGAAAAAATGGGAGTGTAGGCCAGCCTTCGTGTATTACATGAATGATGGTGTTTA
 TGGTTCTTTTGGCAGTAAGCTTTCTGAGGACTTAAATACCATTCCAGAGGTTACAAAGAAATACAAGGAA
 GATGAGCCTCTGTTTACAAGCAGCCTTTGGGGTCCATCCTGTGATGAGCTTGATCAAATTGTGAAAGCT
 GTCTTCTCTGAGCTGAATGTGGGAGATTGGCTTATCTTTGATAACATGGGAGCAGATTCTTCCACGA
 ACCATCTGCTTTTAAATGATTTTTCAGAGGCCAGCTATTTATTTTATGATGTCATTGAGTGGTATGAG
 ATGCAAGATGCTGGAATTAATTCAGATGCAATGATGAAAACTTCTTCTTGCACCCTCTGTATTGAGC
 TGAGCCAAGAAGACAGCTTTTCCACTGAAGCTTAAACAGGCATTAACGCTTCCTTAGATCTGAAGTCGA
 GGTTAAGCTTGTCTGGTCTACATTCAGTGTGGGGGAAAAAATCAATCTTTATTCTGTTAATTTCTTG
 GAAACAAATTCATAGTAATAGCTATTTGGGACCAGACAAAATCAGCTTTCATCTATAATTCATTGGGGT
 AATAGGGGATTTAGATAATGTATCCAGAGTTAAACATACCAGTTTGACCCACCCCTTAAGCGTTTAAAT
 AAAATATGCAACAAAATGGATGACTTAGTGGAGATGGAAGCCATTAAGTGGGTTCCCATCAAATCGTT
 TACATACAAGTACACAGTTTTTATAAGGATTCCTGTTAAAAGTCTTGTAAGTTGATGTCTTTCACCCAG
 ATATATACATGTGAGTGAAGACCAGTGTGACTTCATTAGATACGTTTGTGATTTAGGATGTGTA
 TTTGTGCTTTTGAAGTGTAGTTTAAATAATGTAATAATGCATCATAGTATTTGTTGATTTGACCTAATG
 TAACCCTGTATGATTGCAATAAAAATTTGTGTAGATCTTAAAAAAAAAAAAAAAAAAAA

Restriction Sites: RsrII-NotI

ACCN: NM_018745

Insert Size: 1347 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).

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: [BC019412](#), [AAH19412](#)

RefSeq Size: 2507 bp

RefSeq ORF: 1347 bp

Locus ID: 54375

UniProt ID: [O35484](#)

Cytogenetics: 15 B3.1

Gene Summary: The protein encoded by this gene belongs to the antizyme inhibitor family, which plays a role in cell growth and proliferation by maintaining polyamine homeostasis within the cell. Antizyme inhibitors are homologs of ornithine decarboxylase (ODC, the key enzyme in polyamine biosynthesis) that have lost the ability to decarboxylase ornithine; however, retain the ability to bind to antizymes. Antizymes negatively regulate intracellular polyamine levels by binding to ODC and targeting it for degradation, as well as by inhibiting polyamine uptake. Antizyme inhibitors function as positive regulators of polyamine levels by sequestering antizymes and neutralizing their effect. This gene encodes antizyme inhibitor 1, the first member of this gene family that is ubiquitously expressed, and is localized in the nucleus and cytoplasm. Overexpression of antizyme inhibitor 1 gene has been associated with increased proliferation, cellular transformation and tumorigenesis. Gene knockout studies showed that homozygous mutant mice lacking functional antizyme inhibitor 1 gene died at birth with abnormal liver morphology. RNA editing of this gene, predominantly in the liver tissue, has been linked to the progression of hepatocellular carcinoma. Alternatively spliced transcript variants have been described for this gene. [provided by RefSeq, Sep 2014]

Transcript Variant: This variant (2) lacks an internal 5' non-coding exon, thus has a shorter 5' UTR compared to variant 1. Variants 1 and 2 encode the same isoform (1). **Sequence Note:** This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.