

Product datasheet for **MR221901**

Azin1 (NM_018745) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Azin1 (NM_018745) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Azin1
Synonyms:	1700085L02Rik; AZI; O; Oazi; Oazin
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR221901 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAAAGGATTTATTGACGATGCGAACTACTCCGTTGGCCTGTTGGATGAAGGAACAACCTTGGAAATG
 TTATTGATAACTATGTTTATGAACATACCCTGACAGAGAAAAATGCATTTTTTGTGGGGATCTTGGGAA
 GATCGTGAAGAAGCACAGTCAGTGGCAGACCGTGGTGGCTCAGATAAAGCCGTTTTACACGGTGAAGTGC
 AACTCCACTCCAGCCGTGCTTGAGATCTTGGCAGCTCTTGGAACTGGGTTTGCTTGTCCAGCAAAAATG
 AAATGGCTTTAGTGAAGAATTGGGTGTATCTCCAGAAAACATCATTTTCAACAAGCCTTGAAGCAAGT
 GTCTCAGATAAAGTATGCAGCAAAAAGTTGGAGTAAATATTATGACATGTGACAATGAGATTGAATTAAG
 AAAATTGCAAGGAATCACCCAAATGCCAAGGTCTTACTACATATTGCAACAGAAGATAATATTGGAGGTG
 AAGATGGTAACATGAAGTTTGGCACTACACTGAAGAATTGTAGGCATCTTTTGGAAATGTGCCAAGGAACT
 TGATGTCCAAATAATTGGGGTAAATTTTCATGTTTCAAGTCTTCAAAGAATATCAAGTATATGTACAT
 GCCTGTCTGATGCTCGATGTGTGTTTGCATGGCTGGAGAGTTTGGCTTACAATGAACATGTTAGACA
 TCGGTGGAGGCTTACAGGAACTGAAATTCAGTTGGAAGAGGTTAATCATGTTATCAGTCCCTCTGTTGGA
 TATTTACTTCCCTGAAGGATCTGGCATTAGATAATTTGAGAACCTGGAAGCTACTATGTATCTTCTGCG
 TTTACACTTGCAGTCAATATTATTGCTAAGAAAGTTGTTGAAAATGATAAATTTTCTCTGGAGTAGAAA
 AAAATGGGAGTGATGAGCCAGCCTTCGTGTATTACATGAATGATGGTGTATGTTTCTTTTGGAGTAA
 GCTTTCTGAGGACTTAAATACCATTCCAGAGGTTACAAGAAATACAAGGAAGATGAGCCTCTGTTTACA
 AGCAGCCTTTGGGTCCATCCTGTGATGAGCTTGATCAAATTGTGAAAGCTGTCTTCTTCTGAGCTGA
 ATGTGGGAGATTGGCTTATCTTTGATAACATGGGAGCAGATTCTTCCACGAACCATGCTTTTTAATGA
 TTTTCAGAGGCCAGCTATTTATTTTCATGATGTCATTCAGTATTGGTATGAGATGCAAGATGCTGGAATT
 ACTTCAGATGCAATGATGAAAACTTCTTCTTGCACCCTCTTGTATTAGCTGAGCCAAGAAGACAGCT
 TTTCCACTGAAGCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR221901 protein sequence
 Red=Cloning site Green=Tags(s)

MKGFIDDANYSVGLLDEGTNLGNVIDNYVYEHTLTKNAFFVGD LGKIVKKHSQWQTVAQIKPFYTVKC
 NSTPAVLEILAALGTGFACSSKNEMALVQELGVSPENIIFTSPCKQVSQIKYAAKVGVMIMTCDNEIELK
 KIARNHPNAKVL LHIATEDNIGGEDGNMKFGTTLKNCRHLLLECAKELDVQIIGVKFHVSSACKKEYQVYVH
 ALSDARCVFDMAGEFGFTMNMLDIGGGFTGTEIQLEEVNHVISPLLDIYFPEGSGIQIISEPGSYVYVSSA
 FTLAVNIIAKKVENDKFSVGVEKNGSDEPAFVYVMNDGVYGSFASKLSEDLNTIPEVHKKYKEDEPLFT
 SSLWGPSCDEL DQIVESCLLPELVGDWLI FDNMGADSFHEPSAFNDFQRP AIYFMMSFSDWYEMQDAGI
 TSDAMMKNFFAPSCIQLSQEDSF STEA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_018745

ORF Size: 1347 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_018745.1](#), [NM_018745.2](#), [NM_018745.3](#), [NM_018745.4](#), [NM_018745.5](#), [NP_061215.1](#)

RefSeq Size: 4868 bp

RefSeq ORF: 1347 bp

Locus ID: 54375

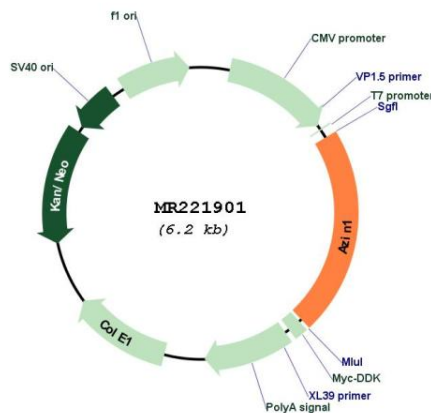
UniProt ID: [O35484](#)

Cytogenetics: 15 B3.1

MW: 49.6 kDa

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]

Product images:



Circular map for MR221901