

Product datasheet for **RC219070**

ASZ1 (NM_130768) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ASZ1 (NM_130768) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ASZ1
Synonyms:	ALP1; ANKL1; C7orf7; CT1.19; GASZ; Orf3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC219070 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGGCGAGCGCGCTGCGAGGCTGCCAGTGGCTGGCGGAGGCGAGAGTAGCGAGAGCGAGGATGATG
 GCTGGGAGATTGGGTATCTCGACCGGACGTCTCAGAAATTGAAAAGGCTATTACCCATTGAAGAAAAGAA
 AGAAAAATTTAAGAAAGCAATGACCATCGGAGATGTTTCATTGGTCCAGGAGCTCCTAGATTCTGGCATT
 AGTGTAGATTCCAACCTTCAGTATGGATGGACTCCCTTATGTATGCTGCTAGTGTGCCAATGCAGAGC
 TGGTTCGGGTCTTTTGGACAGAGGTGCTAATGCAAGCTTTGAGAAGGATAAGCAAAGTATTTTGATAAC
 TGCATGTTCTGCTCATGGCTCAGAGGAACAGATCTTGAAGTGTGTAGAACTACTCTTCAAGAAATGCT
 GATCCAAATGTTGCTTGTAGGAGACTTATGACCCCAATCATGTATGCTGCTCGAGATGGTCACACCCAGG
 TTGTTGCTCTCCTTGTGCTCATGGAGCAGAAGTTAATACCCAGGATGAGAATGGTTACTGCTTTAAC
 GTGGGCAGCAGCTCAGGGTCATAAAATATAGTTTGAAGTTGCTTGAAGTTGGAGCTAATAAATGCTA
 CAAACCAAAGATGAAAGATGCCAAGTGAGATTGCAAAAAGAAACAAACATCATGAGATCTTCAACTTAC
 TTTCTTTTACTTTAAATCCATTGGAAGGAAAACCTCAACAGCTAACTAAAGAAGACACTATTTGTAAAT
 ATTGACAACAGATTCTGATAGAGAAAAAGATCACATTTTTAGTTCATATACAGCATTTGGAGATCTGGAA
 GTATTTTACATGGTCTTGGACTTGAACATATGACAGATTTACTAAAGGAAAGGGATATAACGTTAAGAC
 ATCTTTTGACCATGAGGGAAGATGAATTTACAAAGAAATGGAATTACAGTAAAGACCAGCAGAAAATCT
 GGCTGCTCTTAAGAAGTACAGGTAGAAGATACAATTTGGAGAGCTATCTGAAGAGACAAAGTTGGAA
 ATCAGTGGTGATGAGTTCTCACTTTCTCTCAAAATTAATAAAGAGTGTGGCCATTTAATAACAGCTG
 TACAGAATGTTATTACTGAGTTACCTGTAAATCTCAAAAGATAACACTGGAATGGGCTTCTCCACAGAA
 TTTTACTTCAGTTTGTGAAGAATTGGTTAATAATGTTGAAGATTGAGTGAAAAGGCTCTGCAAACTAAAA
 GACCTAATTCAAAAGTTGCAAAATGAACGGGAAAATGATCCAACATCATATACAATTAAGGGAAGAAGTAT
 CTACATGGAATAGTAGAATTTTGAAGAGGACAGCTATTACCATATGCGGATTCGGTTTTCTTTTCAT
 TTGCAAGCTAACTTTCCAGAGGAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC219070 protein sequence
 Red=Cloning site Green=Tags(s)

MAASALRGLPVAGGESSESEDDGWEIGYLDRTSQKLKRLPIEEKKEKFKKAMTIGDVSLVQELLDSGI
 SVDSNFQYQWTPLMYAASVANAELVRVLLDRGANASFEKDKQSILITACSAHGSEEQILKCVELLSRNA
 DPNVACRRMLMTPIMYAARDGHTQVVALLVAHGAEVNTQDENGYTALTWAARQGHKNIVLKLELGANKML
 QTKDGMPSIEIAKRKHHEIFNLLSFTLNPLEGKLQQLTKEDTICKILTDSREKDHIFSSYAFGDLE
 VFLHGLGLEHMTDLLKERDITLRHLLTMREDEFTKNGITSKDQKILAALKELQVEEIQFGELSEETKLE
 ISGDEFLNLLKLNKQCGHLITAVQNVITELPVNSQKITLEWASPNFTSVCEELVNNVEDLSEKVKCLK
 DLIQKLQNERENDPHTIQLREEVSTWNSRILKRTAITICGFLLFICKLTFQRK

TRTRPLE**QKL**ISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6465_d05.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_130768

ORF Size: 1425 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM 130768.3

RefSeq Size: 1865 bp

RefSeq ORF: 1428 bp

Locus ID: 136991

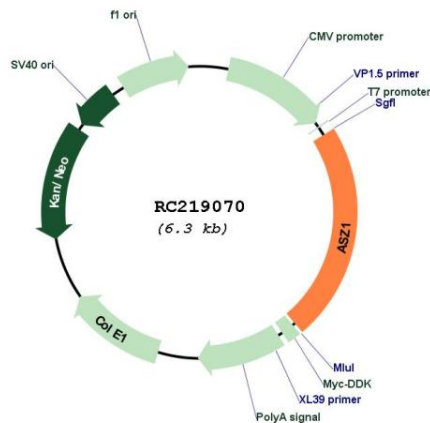
UniProt ID: [Q8WWH4](#)

Cytogenetics: 7q31.2

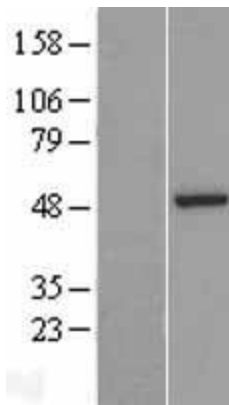
MW: 53.5 kDa

Gene Summary: Plays a central role during spermatogenesis by repressing transposable elements and preventing their mobilization, which is essential for the germline integrity. Acts via the piRNA metabolic process, which mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins and governs the methylation and subsequent repression of transposons. Its association with pi-bodies suggests a participation in the primary piRNAs metabolic process. Required prior to the pachytene stage to facilitate the production of multiple types of piRNAs, including those associated with repeats involved in the regulation of retrotransposons. May act by mediating protein-protein interactions during germ cell maturation (By similarity).[UniProtKB/Swiss-Prot Function]

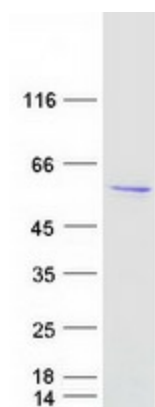
Product images:



Circular map for RC219070



Western blot validation of overexpression lysate (Cat# [LY408931]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219070 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ASZ1 protein (Cat# [TP319070]). The protein was produced from HEK293T cells transfected with ASZ1 cDNA clone (Cat# RC219070) using MegaTran 2.0 (Cat# [TT210002]).