

Product datasheet for RC219386

TIA1 (NM_022173) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TIA1 (NM_022173) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TIA1
Synonyms:	ALS26; TIA-1; WDM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219386 representing NM_022173 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGAGGACGAGATGCCAAGACTCTACGTCGGTAACCTTTCCAGAGATGTGACAGAAGCTCTAATTC
TGCAACTCTTAGCCAGATTGGACCTTGTAAAACTGCAAAATGATTATGGATACAGCTGGAAATGATCC
CTATTGTTTTGTGGAGTTTCATGAGCATCGTCATGCAGCTGCAGCATTAGCTGCTATGAATGGACGGAAG
ATAATGGGTAAGGAAGTCAAAGTGAATTGGCAACAACCCCTAGCAGTCAAAGAAAGATACAAGCAGTA
GTACCGTTGTGACACACAGCGTTCACAAGATCATTTCCATGTCTTTGTTGGTGTCTCAGCCAGAAAT
TACAACTGAAGATATAAAGCTGCTTTTGCACCATTTGGAAGAATATCAGATGCCCGAGTGGTAAAAGAC
ATGGCAACAGGAAAGTCTAAGGGATATGGCTTTGTCTCCTTTTTCAACAATGGGATGCTGAAAACGCCA
TTCAACAGATGGGTGGCCAGTGGCTTGGTGAAGACAAATCAGAACTAACTGGGCAACCCGAAAGCCTCC
CGCTCAAAGAGTACATATGAGTCAAAACCAACAGCTATCATATGATGAGGTTGTAATCAGTCTAGT
CCAAGCAACTGTACTGTATACTGTGGAGGTGTTACTTCTGGGCTAACAGAACTAAATGCGTCAGACTT
TTCCACATTTGGACAAATAATGGAAATTCGAGTCTTTCCAGATAAAGGATATTCATTTGTTCCGGTTCAA
TTCCATGAAAGTGCAGCACATGCAATTGTTTCTGTTAATGGTACTACCATTGAAGTTCATGTTGTGAAA
TGCTATTGGGGCAAAGAACTCTTGATATGATAAATCCCGTGCAACAGCAGAATCAAATGGATATCCCC
AACCTTATGGCCAGTGGGGCCAGTGGTATGGAATGCACAACAATTTGGCCAGTATATGCCTAATGGTTG
GCAAGTTCCTGCATATGGAATGTATGGCCAGGCATGGAACAGCAAGGATTTAATCAGACACAGTCTTCT
GCACCATGGATGGGACCAATTATGGAGTGCAACCCGCTCAAGGGCAAAATGGCAGCATGTTGCCAATC
AGCCTTCTGGGTATCGAGTGGCAGGGTATGAAACCCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC219386 representing NM_022173
Red=Cloning site Green=Tags(s)

MEDEMPKTL YVGNL SRDVTEAL I LQLFSQIGPCKNCKMIMDTAGNDPYCFVFEHEHRHAAAAAAMNGRK
 IMGKEVKVNWATTPSSQK KDTSSSTVVSTQRSQDHFHVFVGDLSPEITTEDIKAAFAPFGRISDARVVKD
 MATGKSKGYGFVSFFNKWDAENAIQQMGGQWLGGRIQRTNWATRKPAPKSTYESNTKQLSYDEVVNQSS
 PSNCTVYCGGVT SGLTEQLMRQTFSPFGQIMEIRVFPDKGYSFVRFNSHESAHAHIVSVNGTTIEGHVVK
 CYWGKETLDMINPVQQNQIGYPQPYGQWGWYNAQQIGQYMPNGWQVPAYGMYGQAWNQQGFNQTS
 APWMGPNYGVQPPQNGSMLPNQPSGYRVAGYETQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8022_a09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_022173

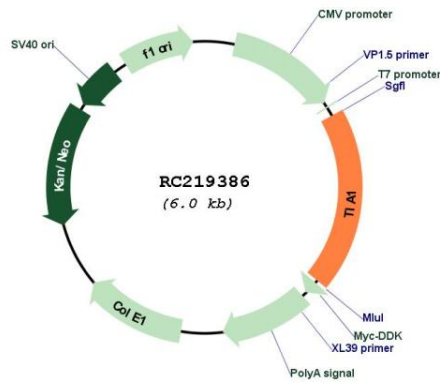
ORF Size: 1158 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

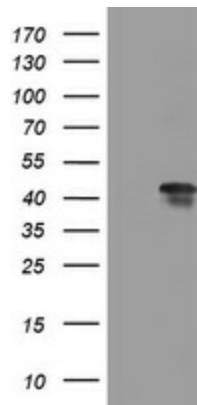
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<ol style="list-style-type: none">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_022173.4
RefSeq Size:	2390 bp
RefSeq ORF:	1161 bp
Locus ID:	7072
UniProt ID:	P31483
Cytogenetics:	2p13.3
Domains:	RRM, RRM_1
Protein Families:	Druggable Genome
MW:	42.8 kDa
Gene Summary:	The product encoded by this gene is a member of a RNA-binding protein family and possesses nucleolytic activity against cytotoxic lymphocyte (CTL) target cells. It has been suggested that this protein may be involved in the induction of apoptosis as it preferentially recognizes poly(A) homopolymers and induces DNA fragmentation in CTL targets. The major granule-associated species is a 15-kDa protein that is thought to be derived from the carboxyl terminus of the 40-kDa product by proteolytic processing. Alternative splicing resulting in different isoforms has been found for this gene. [provided by RefSeq, May 2017]

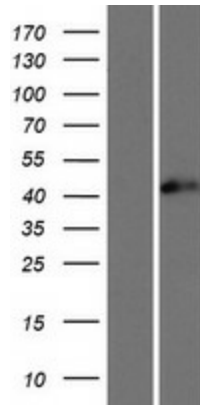
Product images:



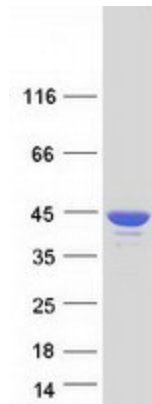
Circular map for RC219386



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TIA1 (Cat# RC219386, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TIA1 (Cat# [TA800657]). Positive lysates [LY411728] (100ug) and [LC411728] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY411728]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219386 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TIA1 protein (Cat# [TP319386]). The protein was produced from HEK293T cells transfected with TIA1 cDNA clone (Cat# RC219386) using MegaTran 2.0 (Cat# [TT210002]).