

Product datasheet for **RC218599**

MTA1 (NM_004689) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	MTA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC218599 representing NM_004689
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCCGCCAACATGTACAGGGTCGAGACTACGTCTACTTTGAGAACTCCTCCAGCAACCCATACCTGA
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 GAGGCGGGACATCTCCAGCACCTCATCGCCCTGGCCGACAAGCACGCAACCCTGTCAGTCTGCTATAAG
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Protein Sequence: >RC218599 representing NM_004689
 Red=Cloning site Green=Tags(s)

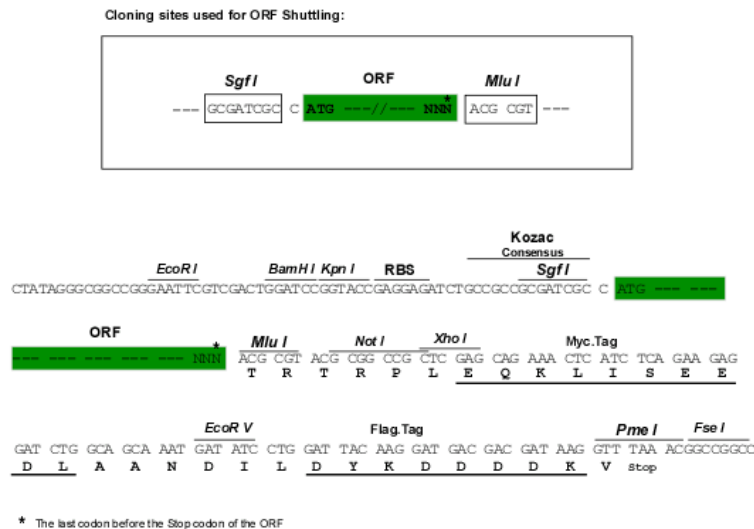
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 SSLTPAKVAPVINNGSPTILGKRSYEQHNGVDGNMCKRLLMPSRGLANHGQTRHMGPSRNLNNGKSYPT
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 PPPAPVNDEPIVIED

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6205_a11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004689

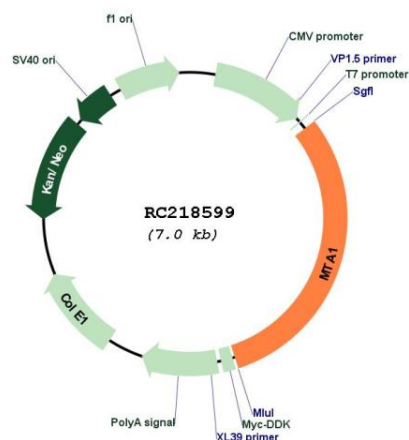
ORF Size: 2145 bp

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](#)

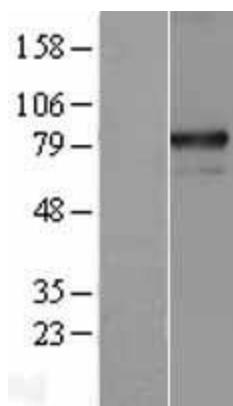
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>NM_004689.4</u>
RefSeq Size:	2662 bp
RefSeq ORF:	2148 bp
Locus ID:	9112
UniProt ID:	<u>Q13330</u>
Cytogenetics:	14q32.33
Domains:	GATA, ELM2, myb_DNA-binding, BAH
Protein Families:	Druggable Genome, Transcription Factors
MW:	80.6 kDa
Gene Summary:	This gene encodes a protein that was identified in a screen for genes expressed in metastatic cells, specifically, mammary adenocarcinoma cell lines. Expression of this gene has been correlated with the metastatic potential of at least two types of carcinomas although it is also expressed in many normal tissues. The role it plays in metastasis is unclear. It was initially thought to be the 70kD component of a nucleosome remodeling deacetylase complex, NuRD, but it is more likely that this component is a different but very similar protein. These two proteins are so closely related, though, that they share the same types of domains. These domains include two DNA binding domains, a dimerization domain, and a domain commonly found in proteins that methylate DNA. The profile and activity of this gene product suggest that it is involved in regulating transcription and that this may be accomplished by chromatin remodeling. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2011]

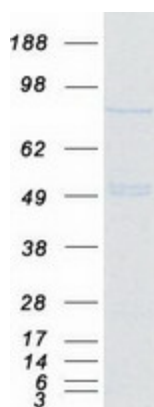
Product images:



Circular map for RC218599



Western blot validation of overexpression lysate (Cat# [LY401480]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218599 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MTA1 protein (Cat# [TP318599]). The protein was produced from HEK293T cells transfected with MTA1 cDNA clone (Cat# RC218599) using MegaTran 2.0 (Cat# [TT210002]).