OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RR212067

Tut1 (NM_001033901) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tut1 (NM_001033901) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tut1
Synonyms:	MGC125034
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

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ORF Nucleotide Sequence:

>RR212067 representing NM_001033901
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGCGGTGGATTCGGATGTTGTATCGCTGCCGCGTGGCCGCTTTCGCTGCTGCCTCTGCGATGTTA
CTACAGCCAACCGACCCAGCCTAGATGCCCACTTGAAAGGCCGGAAGCACCGGGATCTGGTACAACTACG
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Protein Sequence:

>RR212067 representing NM_001033901
Red=Cloning site Green=Tags(s)

MAAVDSDVVSLPRGRFRCCLCDVTTANRPSLDAHLKGRKHRDLVQLRATRKAQGLRSVFVSGFPRDVGSA
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GVDSNSHQLAQALAEAADVGAQMVKLVELRELSEAERQLRTLVVALMQEVFTEFFPGCVVHPFGSSVNSF
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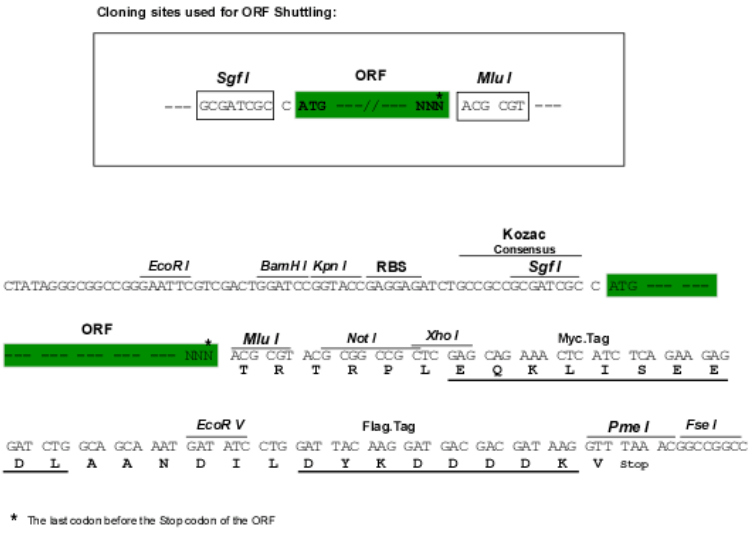
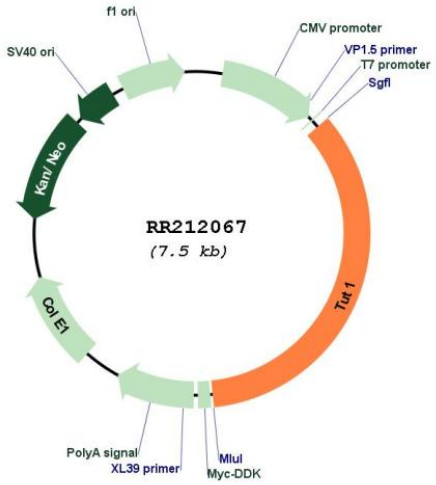
Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001033901
ORF Size:	2598 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_001033901.1, NP_001029073.1
RefSeq Size:	2699 bp
RefSeq ORF:	2601 bp
Locus ID:	499314
UniProt ID:	Q3MHT4
Cytogenetics:	1q43

MW:	94.4 kDa
Gene Summary:	Poly(A) polymerase that creates the 3'-poly(A) tail of specific pre-mRNAs. Localizes to nuclear speckles together with PIP5K1A and mediates polyadenylation of a select set of mRNAs, such as HMOX1. In addition to polyadenylation, it is also required for the 3'-end cleavage of pre-mRNAs: binds to the 3' UTR of targeted pre-mRNAs and promotes the recruitment and assembly of the CPSF complex on the 3' UTR of pre-mRNAs. In addition to adenylyltransferase activity, also has uridylyltransferase activity. However, the ATP ratio is higher than UTP in cells, suggesting that it functions primarily as a poly(A) polymerase. Acts as a specific terminal uridylyltransferase for U6 snRNA in vitro: responsible for a controlled elongation reaction that results in the restoration of the four 3'-terminal UMP-residues found in newly transcribed U6 snRNA. Not involved in replication-dependent histone mRNA degradation (By similarity). [UniProtKB/Swiss-Prot Function]