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Product datasheet for MR219695

Top2a (NM_011623) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Top2a (NM_011623) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Top2a
Synonyms:	Top-2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR219695 representing NM_011623 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGAGTTGTCACCGCTGCAGCCTGTAAATGAAAATATGCTAATGAACAAAAAGAAGAATGAAGATGGCA AGAAAAGATTGTCTATTGAAAGAATCTATCAGAAAAAAACACAACTGGAACATATACTGCTCCGCCCAGA TACCTACATTGGCTCTGTGGAGTTAGTGACCCAGCAAATGTGGGTTTACGATGAAGATGTTGGCATTAAC TACAGGGAAGTCACTTTTGTTCCTGGTTTGTATAAAATCTTTGATGAGATTCTAGTTAATGCTGCTGATA ACAAACAAAGGGACCCAAAAATGTCTTGTATTAGAGTCACAATTGATCCAGAAAATAATGTAATTAGCAT CTGGAATAATGGGAAAGGAATCCCTGTTGTTGAACACAAAGTTGAGAAAATATATGTCCCAGCTCTCATA TTTGGACAACTCCTGACCTCCAGTAACTATGACGACGATGAGAAGAAAGTGACAGGTGGTCGAAATGGCT ATGGAGCTAAACTGTGTAACATATTCAGCACCAAATTTACTGTGGAAACAGCCAGTAGAGAGTACAAGAA AATGTTCAAACAGACGTGGATGGATAACATGGGGAGAGCTGGTGACATGGAACTCAAGCCCTTTAGTGGA GAAGATTATACATGTATCACCTTCCAGCCTGACTTATCTAAGTTTAAAATGCAAAGCCTGGACAAAGATA TTGTTGCACTGATGGTCAGAAGAGCATATGATATCGCTGGCTCCACTAAAGATGTCAAAGTCTTTCTTAA TGGAAATAGTCTGCCAGTGAAAGGATTCCGCAGTTACGTGGATTTGTATTTGAAGGATAAGGTAGATGAA ACTGGGAATTCACTGAAGGTGATACATGAACAGGTCAATCCCCGGTGGGAAGTGTGCTTAACAATGAGCG AGAGAGGCTTCCAGCAGATTAGCTTCGTCAACAGCATTGCGACTTCTAAGGGCGGCAGACATGTCGATTA TGTAGCTGATCAGATTGTGAGCAAACTCGTTGATGTGGTGAAAAAGAAGAACAAGGGCGGGGTTGCAGTG AAGGCTCATCAGGTGAAAAATCACATGTGGATTTTTGTAAATGCCTTAATTGAAAACCCAACCTTTGACT CTCAAACAAAAGAAAACATGACTTTACAAGCCAAGAGCTTTGGATCAACATGTCAATTAAGTGAAAAGTT CATCAAAGCTGCAATTGGTTGTGGTATTGTGGAAAGCATACTAAACTGGGTGAAGTTCAAGGCTCAAATC CAACTGAACAAGAAGTGTTCAGCTGTAAAACATACCAAAATCAAGGGAATCCCCAAACTTGATGATGCCA ACGATGCAGGGAGCCGAAACTCTACTGAATGCACACTTATCCTGACTGAGGGAGACTCAGCAAAAACTCT AGCCGTTTCAGGCCTTGGAGTGGTTGGAAGAGACAAATATGGGGTGTTCCCTCTTAGAGGAAAGATACTC AATGTGCGAGAAGCCTCTCATAAACAGATCATGGAAAATGCTGAAATTAACAATATCATCAAGATTGTGG

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Protein Sequence:

>MR219695 representing NM_011623
Red=Cloning site Green=Tags(s)

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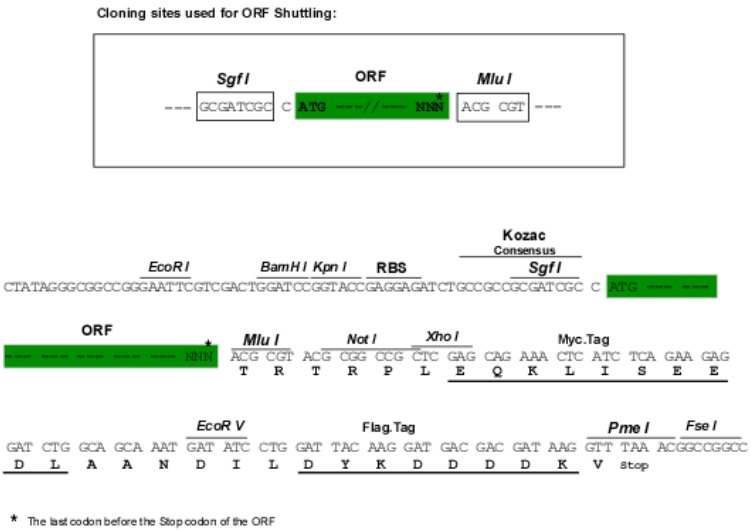
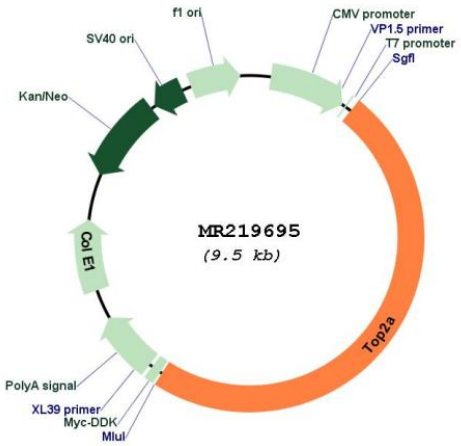
Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_011623
ORF Size:	4584 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:	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_011623.2, NP_035753.2
RefSeq Size:	5217 bp
RefSeq ORF:	4587 bp
Locus ID:	21973
UniProt ID:	Q01320
Cytogenetics:	11 62.91 cM
MW:	173.2 kDa
Gene Summary:	Control of topological states of DNA by transient breakage and subsequent rejoining of DNA strands. Topoisomerase II makes double-strand breaks. Essential during mitosis and meiosis for proper segregation of daughter chromosomes. May play a role in regulating the period length of ARNTL/BMAL1 transcriptional oscillation (PubMed:24321095).[UniProtKB/Swiss-Prot Function]