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Product datasheet for MR230971

Tlk2 (NM_001294331) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tlk2 (NM_001294331) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tlk2
Synonyms:	4933403M19Rik; PKU-alpha; PKUalpha; Tlk
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

ORF Nucleotide Sequence:

>MR230971 representing NM_001294331
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATGGAAGAACTGCATAGCCTGGACCCACGAAGGCAGGAATTACTAGAGGCCAGGTTCACTGGAGTTG
GTGTAAGTAAGGGGCCACTCAACAGTGAGTCTTCCAACCAGAGTCTGTGCAGCGTGGGGTCGTTGAGTGA
TAAAGAAGTAGAGACTCCTGAGAAAAAGCAGAATGACCAGCGAAATCGGAAAAGGAAAGCCGAGCCATAT
GACACTAGCCAAGGGAAAGGCACTCCTAGGGGACATAAAATTAGTGATTACTTTGAGCGTCGAGCAGAAC
AGCCTCTGTATGGTTTAGATGGCAGTGCAGCAAAGGAGGCCTCAGAAGAGCAGTCTGCTCTGCCCACCCT
CATGTCAGTGATGTTAGCAAAACCGCGACTTGACACAGAGCAGTTAGCGCCACGGGGAGCTGGCCTCTGC
TTCACTTTCGTCTCTGCTCAACAAAACAGTCCTTCTTCTACGGGTTCTGGCAATACAGAACATTCTTGCA
GCTCCCAAAAACAGATCTCCATCCAGCACAGACAGACCCAGTCTGACCTCACAATAGAAAAAATATCTGC
ACTAGAAAACAGTAAGAACTCTGACTTAGAGAAGAAGGAAGGAAGAATAGATGATTTATTAAGAGCCAAC
TGTGATTTGAGACGACAGATAGATGAACAGCAAAAGATGCTAGAGAAATACAAGGAACGATTAAATAGAT
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CATGCAGGACCGATTGCGATTAGGCCACTTTACTACTGTCCGGCATGGAGCCTCGTTTACTGAGCAGTGG
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CAGTCCCAGCAAGATATTCTACAAGAGAATACTATTCTTAAGGCTACTGAAGTACAGTTCCCGCCAAAGC
CAGTAGTAACACCTGAAGCAAAGGCATTTATCAGGAGATGTCTGGCCTATCGAAAGGAAGATCGCATTGA
TGTGCAGCAGCTGGCCTGTGACCCCTACTTGTTGCCTCACATCCGAAAGTCAGTCTCCACAAGTAGCCCT
GCAGGAGCTGCTATTGCATCAACCTCTGGGGCATCCAATAACAGTTCTTCGAAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR230971 representing NM_001294331
Red=Cloning site Green=Tags(s)

MMEELHSLDPRRQELLEARFTGVGVSKGPLNSESSNQSLCSVGSLSDKEVETPEKKQNDQRNRKRKAEPY
DTSQGKGTPRGHKISDYFERRAEQPLYGLDGSAAKEASEEQSALPTLMSVMLAKPRLDTEQLAPRGAGLC
FTFVSAQQNSPSSTGSGNTEHSCSSQKQISIQHRQTQSDLTIEKISALENSKNSDLEKKEGRIDDLLRAN
CDLRRQIDEQQKMLEKYKERLNRCVTMSKKLLIEKSKQEKMACRDKSMQDRLRLGHFTTVRHGASFTEQW
TDGYAFQNLIKQQERINSQREEIERQRKMLAKRKPPAMGQAPPATNEQKQRKSKTNGAENETLTLAEYHE
QEEIFKLRLGHLKKEEAEIQAELERLERVRNLHIRELKRIHNEDNSQFKDHPTLNDRYLLLHLLGRGGFS
EVYKAFDLTEQRYVAVKIHQLNKNWRDEKKENYHKHACREYRIHKELDHPRIVKLYDYFSLDTDSFCTVL
EYCEGNDLDFYLKQHKLMSEKEARSIIMQIVNALKYLNEIKPPIIHYDLKPGNILLVNGTACGEIKITDF
GLSKIMDDDSYNSVDGMELTSQGAGTYWYLPPECFVVGKEPPKISNKVDVWSVGVIFYQCLYGRKPFGHN
QSQQDILQENTILKATEVQFPPKPVVTPEAKAFIRRCLAYRKEDRIDVQQLACDPYLLPHIRKSVSTSSP
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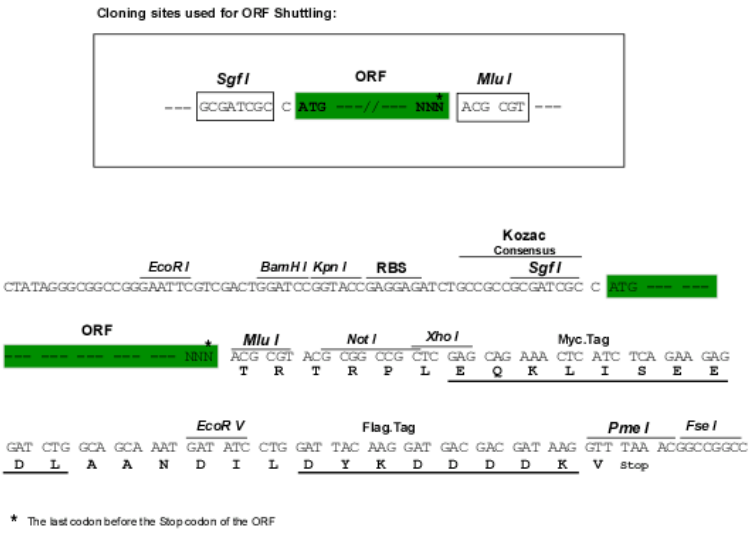
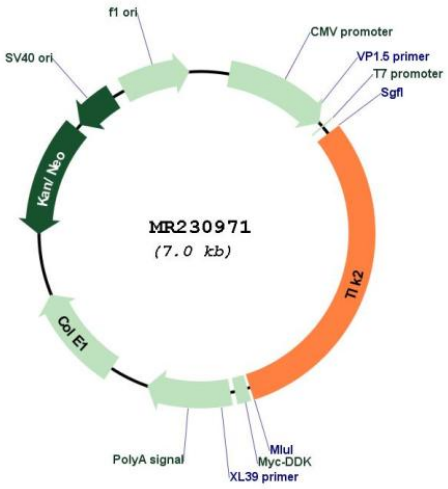
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001294331
ORF Size:	2154 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_001294331.1, NP_001281260.1
RefSeq Size:	5494 bp
RefSeq ORF:	2157 bp

Locus ID:	24086
UniProt ID:	O55047
Cytogenetics:	11 E1
MW:	82.7 kDa
Gene Summary:	Serine/threonine-protein kinase involved in the process of chromatin assembly and probably also DNA replication, transcription, repair, and chromosome segregation. Phosphorylates the chromatin assembly factors ASF1A AND ASF1B. Phosphorylation of ASF1A prevents its proteasome-mediated degradation, thereby enhancing chromatin assembly (By similarity). Negative regulator of amino acid starvation-induced autophagy (By similarity). [UniProtKB/Swiss-Prot Function]