

Product datasheet for **MR230746**

Tlk2 (NM_001294330) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tlk2 (NM_001294330) 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



[View online »](#)

ORF Nucleotide Sequence:

>MR230746 representing NM_001294330
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATGGAAGAACTGCATAGCCTGGACCCACGAAGGCAGGAATTACTAGAGGCCAGTTCCTGAGTTG
 GTGTAAGTAAGGGGCCACTCAACAGTGTCTTCCAACCAGAGTCTGTGCAGCGTGGGGTCTTGTAGTGA
 TAAAGAAGTAGAGACTCCTGAGAAAAAGCAGAATGACCAGCGAAATCGGAAAAGGAAAGCCGAGCCATAT
 GACACTAGCCAAGGAAAGGCCTCTAGGGGACATAAAATTAGTGATTACTTTGAGCGTCGAGCAGAAC
 AGCCTCTGTATGGTTTAGATGGCAGTGCAGCAAAGGAGGCCTCAGAAGAGCAGTCTGCTCTGCCACCCCT
 CATGTCAGTGTATTAGCAAACCCGCGACTTGACACAGAGCAGTTAGCGCCACGGGGAGCTGGCCTCTGC
 TTCCTTTCTGCTCTTCTGACCTACAATAGAAAAATATCTGCACTAGAAAACAGTAAGAACTCTGACT
 TAGAGAAGAAGGAAGGAAGAATAGATGATTTAATAGAGCCAACGTGATTTGAGACGACAGATAGATGA
 ACAGCAAAAGATGCTAGAGAAATACAAGGAACGATTAATAGATGTGTCACCATGAGCAAGAAGCTCCTT
 ATAGAAAAGTCAAAACAAGAGAAGATGGCGTGCAGAGATAAGAGCATGCAGGACCGATTGCGATTAGGCC
 ACTTTACTACTGTCCGGCATGGAGCCTCGTTTACTGAGCAGTGGACAGATGGTTATGCTTTCCAAAACCT
 CATCAAGCAACAGGAAAGGATAAATTCACAGAGAGAAGAGATAGAAAGGCAACGGAAAATGTTAGCAAAA
 CGGAAACCTCCTGCCATGGGTGAGGCCCTCCTGCAACCAATGAGCAGAAAACAACGGAAAAGCAAGACTA
 ATGGAGCTGAAAATGAAACGTTAACGTTAGCCGAGTACCATGAACAAGAGGAAATCTTCAAACCTTAGATT
 AGGTCACTTAAGAAAGAGGAAGCAGAAATCCAGGCAGAGCTGAAAGGCTGAAAGGGTTAGGAATCTA
 CACATCAGGGAATTAAGAAAGGATACATAATGAAGACAATTCGCAGTTTAAAGACCATCCAACACTAAATG
 ACAGATATTTGTTGTTACATCTTTTGGGTAGAGGAGTTTCAGTGAAGTTTACAAGCATTGATCTAAC
 GGAGCAAAAGATATGTAGCTGTGAAAATTCACCAGTTAAATAAAAACTGGAGAGATGAGAAAAAGGAGAAT
 TACCACAAGCATGCGTGTAGGGAATACCGATTACAAGGAGCTGGACCACCCAGGATAGTGAAGCTGT
 ATGATTACTTTTCTGACTGACTGCTTTTGTACAGTATTAGAATACTGTGAAGGGAATGACCTGGA
 CTTCTACCTAAAACAGCACAAATTAATGTCGGAGAAAAGAGCCCGATCCATTATTATGCAGATTGTGAAT
 GCTTTAAAGTACTTAAATGAAATAAAACCTCCCATCATACTATGACCTCAAACAGGTAATATCCTTT
 TAGTAAATGGTACAGCATGTGGAGAGATAAAAATTACAGATTTTGGTCTTCCAAGATCATGGATGATGA
 TAGCTACAATTCAGTGGATGGCATGGAGCTGACGTACAAGGAGCTGGTACTTATTGGTATTTACCACCA
 GAGTGTGTTTGTGGTTGGGAAAGAGCCACCAAGATCTCAATAAAGTCGATGTTTGGTCAAGTGGTGTGA
 TCTTCTACCAGTGTCTTTATGGGAGGAAGGTGAGGAAGAAGGCAGTGGAGCAGCCTGGGGCCATACCCAC
 CACCTCACTGGGATTCTTCTTTGCAATTAATCATTGGAATCCTGAAAGTAGTGGTTAAAGAAAATACAG
 ACTTCTCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR230746 representing NM_001294330
 Red=Cloning site Green=Tags(s)

MMEELHSLDPRRQELLEARFTGVGVSKGPLNSESSNQSLCSVGSLSKDKEVETPEKKQNDQRNRKRKAEPY
 DTSQKGTTPRGHKISDYFERRAEQPLYGLDGSAAKEASEEQSALPTLMSVMLAKPRLDTEQLAPRGAGLC
 FTFVSSDLTIEKISALENSKNSDLEKKEGRIDLLRANCDLRRQIDEQQKMLEKYKERLNRCVTMSKLL
 IEKSKQEKMACRDKSMQDRLRLGHFTTVRHGASFTEQWTDGYAFQNLIKQQRINSQREEIERQRKMLAK
 RKPPAMGQAPPATNEQKQRKSKTNGAENETLTLAEYHEQEEIFKLRLGHLKKEEAEIQAELERLERVNL
 HIRELKRINHEDNSQFKDHPTLNDRYLLHLLGRGGFSEVYKAFDLTEQRYVAVKIHQLNKNWRDEKKN
 YHKHACREYRIHKELDHPRIVKLYDYFLDTSFCTVLEYCEGNLDFYLKQHKLMSEKEARSIIIMQIVN
 ALKYLNEIKPPIIHDLKPGNILLVNGTACGEIKITDFGLSKIMDDSYNSVDGMELTSQGAGTYWYLP
 ECFVVGKEPKKISNKVDVWSVGVIFYQCLYGRKVRKAVEQPGAIPPTSLGFFFAVNHNWPSSGLKKIQ
 TSQ

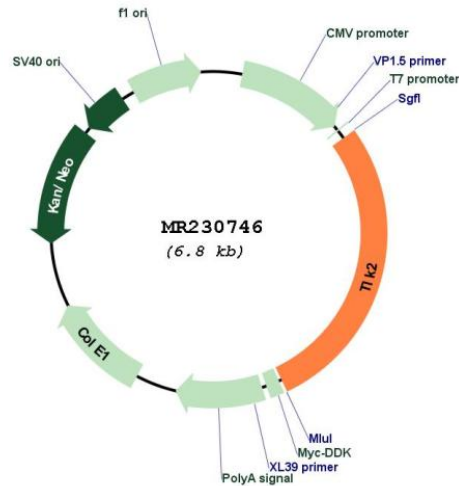
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001294330

ORF Size: 1899 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_001294330.1](#), [NP_001281259.1](#)

RefSeq Size: 3250 bp

RefSeq ORF: 1902 bp

Locus ID: 24086

Cytogenetics: 11 E1

MW: 73.6 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]