

Product datasheet for **MG210263**

Tlk1 (NM_172664) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tlk1 (NM_172664) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tlk1
Synonyms:	4930545J15Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG210263 representing NM_172664
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGTGTCCAAAGTAGCAGTGGAAAGTTTGGAGGGCCGCCATCTTGGTCCCAGGCTCTCCACGTCTCCAA
 CCCCGGGCTCGGCGGCGCGCCAGGTCCCTGCTGAATCACACGCGCCATCCGGGAGGCCAGGGAAGG
 TGCAATGGATGAGCTTCACAGTCTGGACCCAAGAAGGCAAGAATTATTGGAAGCAAGATTTACTGGAGTT
 GCTACTGGGAGTACTGGGAGTACTGGGAGTTGCAGTGTGGAGCAAAAAGCTTCAACAAATAATGAAAGTT
 CTAATCACAGTTTTGGAAGCTTAGGATCTTAAGTGACAAAGAATCAGAGACACCAGAGAAGAAACAATC
 AGAGTCATCCAGGGGAAGAAAGAGAAAAGCAGAAAGTCAGAATGAAAGTAGTCAGGGAAAAAGTATCGGG
 GGACGTGGCCATAAGATCAGCGACTATTTGAATACCAAGGTGGAATGGCTCGAGTCCAGTAAGAGGCA
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 TAGCCCTTCTCCTACTGCATTAGCTTTCCGGGACCACCCTGTTGTACAACCAAGCAGTTATCCTTTAAG
 ATCACTCAAAGTATCTTACAATGCTGAAATTGGCAGCATTAGAAAGTACTAAAAATCAAGACCTGGAGA
 AGAAGGAAGGCCGATTGATGATCTGCTCAGGGCCAAGTGTGATCTCAGCGCGCAATAGATGATCAACA
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 AAGAGTACACAAGAAAAATTGTCTAGCAGAGAAAAGAGTATGCAAGATCGGTTGCGCCTTGGGCACTTTA
 CCACAGTTAGACACGGCGCTTCCCTTACAGAACAGTGGACAGATGGTTTTGCATTTGAGAATCTTGTA
 GCAACAAGAAATGGGTGAATCAACAAAGGGAAGACATTGAACGGCAAGAAAACTTCTAGGCAACGCAAA
 CCTCCCACAGCTAATAATCTCAGGCACCTGCTACCAATCTGAAGCCAAGCAAGAAAGACCAAGGCAG
 TCAATGGAGCGGAAAACGATCCCTTTGTTAGGCCAAATTTACCACAAGTCTGACTCTGGCAGAGTATCA
 TGAACAAGAGGAAATTTTTAACTTAGACTAGGACATCTCAAAAAGGAAGAGGCTGAAATCCAGGCGGAA
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 AACTGGACCACCCAGAATAGTTAACTCTATGATTACTTCTCCTTGGATACAGATACGTTTTGTACAGT
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 AGGTTGACGTGTGGTCAGTTGGGTCATCTTCTCCAGTGCCTCTATGGTAGAAAACCTTTGGTCACAA
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 CCTGTTGTAAGCAGTGAAGCCAAGGCTTCATAAGACGCTGTTTGGCTTACCGAAAAGAAGATCGATTTG
 ATGTGCACCAGCTGGCAAATGACCCATACCTTCTGCCACACATGAGAAGATCAAATCTTCAGGAAACTT
 ACATATGTCTGGGCTGACAGCAACTCCACACCTCCTTCTCAAGCATAATTACTTAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG210263 representing NM_172664
 Red=Cloning site Green=Tags(s)

MSVQSSSGSLEGPPSWSRLSTSPTPGSAARLLNHTPPSGRPREGAMDELHSLDPRRQELLEARFTGV
 ATGSTGSGSCSVGAKASTNNSSNHSFGSLGSLSDKESETPEKKQSESSRGRKRKAESQNESSQGKSIG
 GRGHKISDYFEYQGGNGSSPVRGIPPAIRSPQNSHSHSTPSSSVRPNSPPTALAFGDHPVVQPKQLSFK
 ITQTDLTMLKLAALSTKNQDLEKKEGRIDDLRANCDLRRQIDDDQKLEKYKERLNKCSMSKLLIE
 KSTQEKLSSREKSMQDRRLGHFTTVRHGASFTEQWTDGFAFQNLVKQEWVWVQQRREDIERQRKLLGKRK
 PPTANNSQAPATNSEAKQRKTKAVNGAENDPFVVRPNLPQLLTLAEYHEQEEIFKLRLGHLKKEEAEIQAE
 LERLERVRNLHIRELKRINNEDNSQFKDHPTLNERYLLHLLGRGGFSEVYKAFDLYEQRYAAVKIHQLN
 KSWRDEKKENYHKHACREYRIHKELDHPRIVKLYDYFLDTDTFCTVLEYCEGNDLDFYLKQHKLMSEKE
 ARSIVMQIVNALRYLNEIKPPIIHVDLKPGNILLVDGTACGEIKITDFGLSKIMDDSYGVDGMDLTSQG
 AGTYWYLPPECFVVGKEPPKISNKVDVWSVGVIFFOCLYGRKPFGHNQSQQDILQENTILKATEVQFPVK
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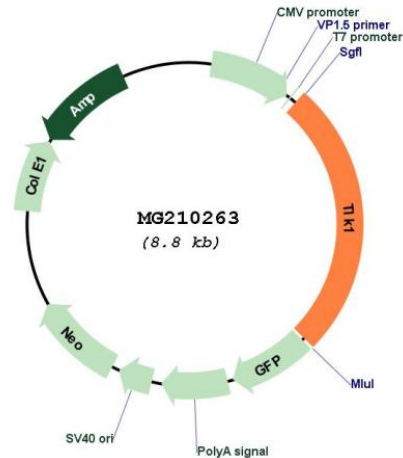
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_172664

ORF Size: 2298 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_172664.3](#), [NP_766252.2](#)

RefSeq Size: 4050 bp

RefSeq ORF: 2301 bp

Locus ID: 228012

UniProt ID: [Q8C0V0](#)

Cytogenetics: 2 C2

Gene Summary: Rapidly and transiently inhibited by phosphorylation following the generation of DNA double-stranded breaks during S-phase. This is cell cycle checkpoint and ATM-pathway dependent and appears to regulate processes involved in chromatin assembly (By similarity). Isoform 3 protects the cells from the ionizing radiation by facilitating the repair of DSBs. In vitro, phosphorylates histone H3 at 'Ser-10' (By similarity).[UniProtKB/Swiss-Prot Function]