

Product datasheet for **MG209514**

Tkt (NM_009388) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tkt (NM_009388) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tkt
Synonyms:	p6; p68
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG209514 representing NM_009388
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAAGTTACCATAAGCCAGATCAGCAGAAGCTCCAGGCCCTGAAGGACACAGCCAATCGCCTGCGCA
 TCAGCTCCATCCAGGCCACCACCGCGCAGGCTCAGGCCACCCACATCATGCTGCAGCGCTGCCGAGAT
 CATGGCTGTCCTGTTTTCCATACCATGCGTTACAAGGCCTGGATCCCCGAAACCCTCACAAATGATCGA
 TTTGTGCTCTCTAAGGGCCATGCAGCTCCATTTTATATGCAGTCTGGGCTGAAGCTGGCTTCTACCCG
 AGGCCGAGCTGCTGAACCTGAGGAAGATCAGCTCTGACTTGGACGGGCATCCTGTCCGAAACAAGCCTT
 CACCGATGTGGCCACTGGCTCCCTGGGCCAGGGCCTGGGAGCTGCTTGCGGGATGGCATAACAGGCAAA
 TACTTTGACAAAGCCAGTACCGAGTCTATTGCATGCTGGGAGACGGGGAGGTCTCCGAGGGCTCCGTCT
 GGGAGGCCATGGCCTTTGCTGGAATTTACAAGCTGGACAACCTCGTTGCCATTTTACATCAACCGCCT
 GGGCCAGAGCGACCCAGCCCGCTGCAGCACAGGTGGACATCTACCAGAAGCGCTGTGAGGCCTTTGGC
 TGGCACACCATCATCGTGGACGGACACAGCGTGGAGGAGCTGTGCAAGGCCTTTGGTCAGGCCAAGCACC
 AACCAACAGCCATCATTGCCAAGACCTCAAGGGCCGAGGGATCACAGGGATTGAAGACAAGGAGGCGTG
 GCACGGGAAGCCCTCCCCAAAAACATGGCCGAGCAGATTATCCAGGAGATTTACAGCCAGGTTACAGAGC
 AAAAAGAAGATCCTGGCCACGCCCTCAGGAGGATGCCCATCCGTGGACATTGCTAACATCCGAATGC
 CTACGCCACCCAGCTACAAAGTGGGGGACAAGATAGCCACCCGGAAGGCCTATGGACTGGCCCTCGCTAA
 GCTGGGCCACGCCAGTACCCTATCATTGCCCTGGATGGAGACACCAAGAATCCACCTTCTCGGAGCTC
 TTCAAAAAGGAGCACCCAGACCGGTTCAATTGAGTGTCTACATTGCCGAGCAAAACATGGTGAAGCTTGGC
 TGGGCTGTGCCACAGTACCCGACAGTGCCTTCTGCAGTACTTTCGCGGCCTTCTTACACCGGGCCTT
 CGACCAGATTCGCATGGCCGCCATCTCTGAGAGCAACATCAACCTCTGTGGCTCCCACTGTGGTGTGCC
 ATTTGGGAAGACGGCCCTCTCAGATGGCCCTCGAAGACCTGGCCATGTTCCGGTCAGTCCCATGTCCA
 CCGTCTTTTACCAAGCGATGGAGTTGCAACAGAGAAGGCAGTGGAGTTAGCAGCCAACACAAAGGGCAT
 TTGCTTCCATCCGGACCAGCCGCCAGAGAATGCCATTATTTATAGCAACAATGAGGATTTCCAGGTCCGC
 CAAGCCAAGTGGTCTGAAGAGCAAGGATGACCAAGTACAGTGTGCGGGCTGGTGAACCTCTGCATG
 AGGCCTTGGCTGCTGCAGAGTCTAAAGAAAGATAAGATCAGCATCCGGGTGCTGGATCCCTTCACTAT
 CAAGCCCTGGACAGGAACTCATCTAGACTCTGCCGAGCAACCAAGGCAGGATCCTCACCGTGGAG
 GACCACTACTACGAAGTGGCATAGGAGAGGCAGTGTCTGCTGCCGTAGTGGGTGAACCTGGAGTACGG
 TCACTCGCTGGCTGTCAGCCAAGTACCACGAAGTGGCAAGCCAGCTGAGCTACTGAAGATGTTCCGGTAT
 TGACAAGGACGCCATTGTGCAAGCTGTAAAGGCCTTGTACCAAGGGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG209514 representing NM_009388
 Red=Cloning site Green=Tags(s)

MEGYHKPDQQLQALKDTANRLRISSIQATTAAGSGHPTSCCSAAEIMAVLFFHTMRYKALDPRNPHNDR
 FVL SKGHAAPIL YAVWAEAGFLPEAELLNLRKISSDL DGHVPKQAF TDVATGSLGQGLGAACGMAYTGK
 YFDKASYRVYCM LGDGEVSEGSVWEAMAFAGIYKLDNLVAIFDINRLGQSDPAPLQHQVDIYQKRCEAFG
 WHTIIVDGH SVEELCKAFGQAKHQPTAIIAKTFKGRGITGIEDKEAWHGKPLPKNMAEQIIQEIYSQVQS
 KKKILATPPPQEDAPSVDIANIRMP T PPSYKVGDKIATR KAYGLALAKLGHASDR IIALDGDTKNSTFSEL
 FKKEHPDRFIECYIAEQNMVSI AVGCATRDRTVPFCSTFAAFFTRAFDQIRMAAISESNINLCGSHCGVS
 IGEDGPSQMALEDLAMFRSVPMTVFYPSDGVATEKAVELAANTKGICFIRTSR PENAI IYSNNEDFQVG
 QAKVV LKSKDDQVTVIGAGVTLHEALAAESLKKDKISIRVLDPFITKPLDRKLI L DSARATKGRILTV E
 DHYYEGGIGEAVSAAVVGEPGVTVTR L AVSQVPRSGKPAELLKMF GIDKDAIVQAVKGLVTKG

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

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:	<ol style="list-style-type: none">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_009388.6
RefSeq Size:	3207 bp
RefSeq ORF:	1872 bp
Locus ID:	21881
UniProt ID:	P40142
Cytogenetics:	14 B
Gene Summary:	<p>This gene encodes an enzyme that binds magnesium and thiamine pyrophosphate and catalyzes the transfer of sugar phosphates to an aldose acceptor. This enzyme is a key component of the pentose phosphate pathway during glycolysis. It is significantly expressed in the cornea and may be involved in the cellular response against oxidative stress. Haploinsufficiency of this gene leads to decreased growth and reduction of adipose tissue. [provided by RefSeq, Dec 2013]</p>