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Product datasheet for MR209514

Tkt (NM_009388) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tkt (NM_009388) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tkt
Synonyms:	p6; p68
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR209514 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAAGGTTACCATAAGCCAGATCAGCAGAAGCTCCAGGCCCTGAAGGACACAGCCAATCGCCTGCGCA
TCAGCTCCATCCAGGCCACCACCGCGGCAGGCTCAGGCCACCCCACATCATGCTGCAGCGCTGCCGAGAT
CATGGCTGTCCTGTTTTTCCATACCATGCGTTACAAGGCCCTGGATCCCCGAAACCCTCACAATGATCGA
TTTGTGCTCTCTAAGGGCCATGCAGCTCCCATTTTATATGCAGTCTGGGCTGAAGCTGGCTTCCTACCCG
AGGCCGAGCTGCTGAACCTGAGGAAGATCAGCTCTGACTTGGACGGGCATCCTGTCCCGAAACAAGCCTT
CACCGATGTGGCCACTGGCTCCCTGGGCCAGGGCCTGGGAGCTGCTTGCGGGATGGCATACACAGGCAAA
TACTTTGACAAAGCCAGCTACCGAGTCTATTGCATGCTGGGAGACGGGGAGGTCTCCGAGGGCTCCGTCT
GGGAGGCCATGGCCTTTGCTGGAATTTACAAGCTGGACAACCTCGTTGCCATTTTTGACATCAACCGCCT
GGGCCAGAGCGACCCAGCCCCGCTGCAGCACCAGGTGGACATCTACCAGAAGCGCTGTGAGGCCTTTGGC
TGGCACACCATCATCGTGGACGGACACAGCGTGGAGGAGCTGTGCAAGGCCTTTGGTCAGGCCAAGCACC
AACCAACAGCCATCATTGCCAAGACCTTCAAGGGCCGAGGGATCACAGGGATTGAAGACAAGGAGGCGTG
GCACGGGAAGCCCCTCCCCAAAAACATGGCCGAGCAGATTATCCAGGAGATTTACAGCCAGGTTCAGAGC
AAAAAGAAGATCCTGGCCACGCCCCCTCAGGAGGATGCCCCATCCGTGGACATTGCTAACATCCGAATGC
CTACGCCACCCAGCTACAAAGTGGGGGACAAGATAGCCACCCGGAAGGCCTATGGACTGGCCCTCGCTAA
GCTGGGCCACGCCAGTGACCGTATCATTGCCCTGGATGGAGACACCAAGAATTCCACCTTCTCGGAGCTC
TTCAAAAAGGAGCACCCAGACCGGTTCATTGAGTGCTACATTGCCGAGCAAAACATGGTGAGCATTGCCG
TGGGCTGTGCCACACGTGACCGGACAGTGCCCTTCTGCAGTACTTTCGCGGCCTTCTTCACACGGGCCTT
CGACCAGATTCGCATGGCCGCCATCTCTGAGAGCAACATCAACCTCTGTGGCTCCCACTGTGGTGTGTCC
ATTGGGGAAGACGGGCCCTCTCAGATGGCCCTCGAAGACCTGGCCATGTTCCGGTCAGTCCCCATGTCCA
CCGTCTTTTACCCAAGCGATGGAGTTGCAACAGAGAAGGCAGTGGAGTTAGCAGCCAACACAAAGGGCAT
TTGCTTCATCCGGACCAGCCGCCCAGAGAATGCCATTATTTATAGCAACAATGAGGATTTCCAGGTCGGC
CAAGCCAAGGTGGTCCTGAAGAGCAAGGATGACCAAGTGACAGTGATCGGGGCTGGTGTAACTCTGCATG
AGGCCTTGGCTGCTGCAGAGAGTCTAAAGAAAGATAAGATCAGCATCCGGGTGCTGGATCCCTTCACTAT
CAAGCCCCTGGACAGGAAACTCATCCTAGACTCTGCCCGAGCAACCAAAGGCAGGATCCTCACCGTGGAG
GACCACTACTACGAAGGTGGCATAGGAGAGGCAGTGTCTGCTGCCGTAGTGGGTGAACCTGGAGTGACGG
TCACTCGCCTGGCTGTCAGCCAAGTACCACGAAGTGGCAAGCCAGCTGAGCTACTGAAGATGTTCGGTAT
TGACAAGGACGCCATTGTGCAAGCTGTGAAAGGCCTTGTCACCAAGGGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

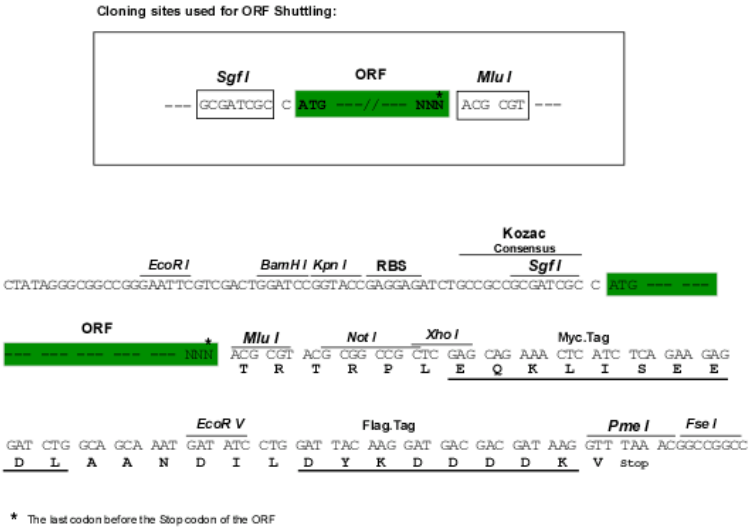
>MR209514 protein sequence
Red=Cloning site Green=Tags(s)

MEGYHKPDQQKLQALKDTANRLRISSIQATTAAGSGHPTSCCSAAEIMAVLFFHTMRYKALDPRNPHNDR
FVLSKGHAAPILYAVWAEAGFLPEAELLNLRKISSDLDGHPVPKQAFTDVATGSLGQGLGAACGMAYTGK
YFDKASYRVYCMLGDGEVSEGSVWEAMAFAGIYKLDNLVAIFDINRLGQSDPAPLQHQVDIYQKRCEAFG
WHTIIVDGHSVEELCKAFGQAKHQPTAIIAKTFKGRGITGIEDKEAWHGKPLPKNMAEQIIQEIYSQVQS
KKKILATPPQEDAPSVDIANIRMPTPPSYKVGDKIATRKAYGLALAKLGHASDRIIALDGDTKNSTFSEL
FKKEHPDRFIECYIAEQNMVSIAVGCATRDRTVPFCSTFAAFFTRAFDQIRMAAISESNINLCGSHCGVS
IGEDGPSQMALEDLAMFRSVPMSTVFYPSDGVATEKAVELAANTKGICFIRTSRPENAIIYSNNEDFQVG
QAKVVLKSKDDQVTVIGAGVTLHEALAAAESLKKDKISIRVLDPFTIKPLDRKLILDSARATKGRILTVE
DHYYEGGIGEAVSAAVVGEPGVTVTRLAVSQVPRSGKPAELLKMFGIDKDAIVQAVKGLVTKG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_009388

ORF Size: 1872 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_009388.6

RefSeq Size: 3242 bp

RefSeq ORF: 1872 bp

Locus ID: 21881

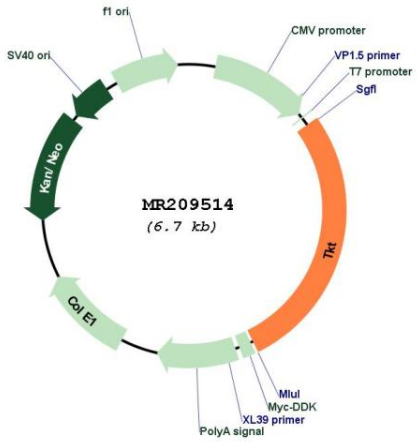
UniProt ID: P40142

Cytogenetics: 14 B

MW: 67.6 kDa

Gene Summary: 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]

Product images:



Circular map for MR209514