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Product datasheet for MC217444

Txk (NM_001122754) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Txk (NM_001122754) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Txk
Synonyms:	A130089B16Rik; Btkl; PTK-RL-18; PTK4; Rlk
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

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Fully Sequenced ORF:

>MC217444 representing NM_001122754
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATCCTGTCCTCTTATAGCTCCTTCCAGTCTGTTCTCTGCTGCTGCTGTTGCCGCTGCTCAGTACAGA
AGAGACAGGTGAGAACTCAGATAAGCCTGAGCAGAGAGGAAGAACTCTCAGAAAAACATTCCCAGCGTCA
GAGGCCGTGGTTCGCCAAACTGATGGGCAAAACTCAATCCAACAGAGGCGGGGTGCAACCCTCGAAGCGC
AAGCCGCTGCCCCCCCTCCCGCAGGAGCCTCCAGATGAGAGAATCCAGGTCAAGGCTCTTTATGACTTCC
TGCCTCGGGAGCCTGGTAATTTGGCACTGAAGAGAGCGGAGGAATATCTGATATTGGAGAGGTGTGATCC
TCACTGGTGGAAGGCCAGAGACCGCTTCGGGAATGAAGGCTTAATCCCAAGCAACTATGTGACAGAAAAC
AGACTCGCCAACTTAGAAATCTATGAATGGTACCACAAGAACATTACGAGAAACCAGACCGAACGCCTAT
TGAGGCAAGAGGCTAAAGAAGGTGCCTTTATCGTGAGAGATTCGAGACACTTGGGGTCTTACACAATCTC
TGTGTTTACAAGAGCTCGAAGGCATACACAGTCTTCAATAAAACATTATCAGATAAAAAAGAATGACTCC
GGACAGTGGTACATCACCGAAAGACATCTCTTCCCCTCAGTCCCCGAGTTGATCCAGTATCACCAGTACA
ATGCAGCTGGTCTCATATCTCGTCTCCGCTATCCCATTGGGCTCCTGGGCAGCTGTTTACCAGCCACATC
TGGTTTTAGCTATGAAAAGTGGGAGATAGATCCATCAGAGTTGGCTTTTGTCAAGGAGATCGGAAGTGGT
CAGTTTGGGGTTGTCCACTTAGGAGAATGGAGAGCACATATCCCGGTCGCCATCAAGGCCATCAATGAAG
GTTCCATGTCTGAAGAAGACTTCATTGAGGAAGCCAAGGTGATGATGAAACTGTCACATTCGAGGTTAGT
TCAACTTTACGGGGTGTGTATACAGCAGAAGCCCCTGTACATAGTGACGGAGTTCATGGAGAACGGCTGC
CTGCTTGACTATCTCAGGGAGAGGAAAGGCCAGCTTCAGAAGGCGCTGCTCTTGAGCATGTGCCAAGACA
TATGTGAAGGGATGGCGTACCTGGAGAGGAGCTGCTATATTCACAGGGATCTGGCTGCCAGGAACTGTTT
GGTCAGTTCTGCCTGCGTAGTAAAGATCTCAGACTTCGGCATGGCGAGGTATGTTTTGGACGATGAATAT
ATCAGTTCTTCTGGAGCTAAGTTCCCAGTCAAGTGGTGCCCACCTGAAGTCTTTCATTTCAACAAATACA
GTAGCAAGTCTGATGTCTGGTCGTTCGGAGTTTTAATGTGGGAAGTTTTTACAGAAGGAAAAATGCCTTT
TGAAAATAAGTCAAATTTGCAAGTGGTGGAAGCCATTTCTCAAGGTTTCCGGCTGTATCGTCCTCACCTG
GCCCCCATGACCATATACAGAGTGATGTACAGTTGCTGGCATGAGAGCCCTAAAGGCCGTCCGACATTTG
CTGAGCTGCTTCAGGTTCTCACGGAGATCGCAGAAACGTGGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001122754

Insert Size: 1584 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_001122754.2, NP_001116226.1
RefSeq Size:	2260 bp
RefSeq ORF:	1584 bp
Locus ID:	22165
UniProt ID:	P42682
Cytogenetics:	5 38.44 cM
Gene Summary:	Non-receptor tyrosine kinase that plays a redundant role with ITK in regulation of the adaptive immune response. Regulates the development, function and differentiation of conventional T-cells and nonconventional NKT-cells. When antigen presenting cells (APC) activate T-cell receptor (TCR), a series of phosphorylation lead to the recruitment of TXK to the cell membrane, where it is phosphorylated at Tyr-420. Phosphorylation leads to TXK full activation. Contributes also to signaling from many receptors and participates in multiple downstream pathways, including regulation of the actin cytoskeleton. Like ITK, can phosphorylate PLCG1, leading to its localization in lipid rafts and activation, followed by subsequent cleavage of its substrates. In turn, the endoplasmic reticulum releases calcium in the cytoplasm and the nuclear activator of activated T-cells (NFAT) translocates into the nucleus to perform its transcriptional duty. With PARP1 and EEF1A1, TXK forms a complex that acts as a T-helper 1 (Th1) cell-specific transcription factor and binds the promoter of IFNG to directly regulate its transcription, and is thus involved importantly in Th1 cytokine production. Phosphorylates both PARP1 and EEF1A1. Phosphorylates also key sites in LCP2 leading to the up-regulation of Th1 preferred cytokine IL-2. Phosphorylates 'Tyr-201' of CTLA4 which leads to the association of PI-3 kinase with the CTLA4 receptor.[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (1) encodes isoform 1.