

## Product datasheet for **SC213453**

### TXK (NM\_003328) Human 3' UTR Clone

#### Product data:

Product Type:	3' UTR Clones
Product Name:	TXK (NM_003328) Human 3' UTR Clone
Vector:	pMirTarget (PS100062)
Symbol:	TXK
Synonyms:	BTKL; PSCTK5; PTK4; RLK; TKL
ACCN:	NM_003328
Insert Size:	1274 bp
Insert Sequence:	>SC213453 3'UTR clone of NM_003328 The sequence shown below is from the reference sequence of NM_003328. The complete sequence of this clone may contain minor differences, such as SNPs. <b>Blue</b> =Stop Codon <b>Red</b> =Cloning site

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GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAAGCCAAGAAGGGCGGAAAGATCGCCGTG
TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC
GCTGTCACAGAGATTGCGGAAACCTGGTGAACCGGAAACAGAAATGCCAACCCAAAGAGTCATCTTGCAAA
ACTGTTCATTTATTGTGAATATCTTCACCATATGGGGTCACTTATGGTGAATATCTTTCTTCAGAGTTGC
TGACTCTTGAAAACAGTGCAAAGATCACAGTTTTTAAAGTTTTTAAAAATTTAAGAATATTCACACAAT
CGTTTTCTATGTGTGAGAGGGATTTGCACACTCTTATTTTTCTGTAAAAATTTTACATCCCAAATGT
GAAGAAGTAAAAAGACTTCGCAGCAGTCTTCATTGTGGTCTCTTCATGATCATAGCCCCAGGAACCC
TTGAGGTTCTTCTCACAAAGGCTGAGAGTGCTTCTTGAAGACGAGTGACATTCACACTTCAGTG
ATCCATGCATAGAATATGAAAATAAATTCTTCCAACCTCATGGGATAAAGGGGACTCCCTTGAAGAATTT
CATGTTTTGGGCTGTATAGCTCTTACAGAAAATGCACCTTTATAAATCACATGAATGTTAGTATTCT
GGAAATGTCTTTTGTAAATAATCTTCCCATGTTATTTAACAAATGTTTTTGCACATATCTGATTAT
ATTGAAAGCAGTTTTTGCATTCGAGTTTTAAACTGTTATAAAATGTAGCCAAAGCTCACCTTTGAA
CAGATCCCGGTGACATTCTATTTCCAGGAAAATCCGGAACCTGATTTTAGTTCTGTGATTTTACACTTT
TTACATGTGAGATTGGACAGTTTCAGAGGCCTTATTTTGTCACTAAGTGTCTCCTGTAATTTTCAGG
AAGATGATTTGTTCTTTCCAGAAGAGGAGACAAAAGCAAGATAGCCAAATGTGACATCAAGCTCCATTG
TTTCGAAATCCAGGATTTTGAATTCGAGATGAAACAACCAGCAATCACAGTTAAATCTTAACTTTGCC
TGCACTCTTTGTAGGAATGATCAGAAATTTATCTTTATCATTCTGAGTGTTCAGGAGTACAATAGGAA
GAAAGATACTGGAGAAAGCACTAATGTAATCACCATGAAGTCTGACAACAGGAGCCCATTTTGGCGTA
CTGTCCCACCTGTATCATGGTTCTCTGGGAACAAGCTTTATGATTCTCATTAGAGTTTTATTTGTTGAT
TGTCAGTAGTTGCGACTTTTAAATTATATTTCCCCCACTCAAAGAATGGTATCTTTATATATCAATGAC
ATTCAATAAATGTGTATTATTTCTAATGAGAA
ACGCGTAAAGCGCCGCGCATCTAGATTGAAAGAAAATGACCGACCAAGCGACGCCAACCTGCCATCA
CGAGATTCGATTCCACCGCCGCTTCTATGAAAGG
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Restriction Sites: SgfI-MluI



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<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the sequence identifier above as a point of reference. Note that the complete sequence of this clone is largely the same as the reference sequence but may contain minor differences , e.g., single nucleotide polymorphisms (SNPs).
<b>Components:</b>	The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.
<b>RefSeq:</b>	<a href="#">NM_003328.3</a>
<b>Summary:</b>	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]
<b>Locus ID:</b>	7294
<b>MW:</b>	50.1