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Product datasheet for SC323530

TNK1 (NM_003985) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TNK1 (NM_003985) Human Untagged Clone
Tag:	Tag Free
Symbol:	TNK1
Synonyms:	KOS1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

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Fully Sequenced ORF:

>OriGene ORF within SC323530 sequence for NM_003985 edited (data generated by NextGen Sequencing)

ATGCTTCCTGAGGCTGGCTCTCTGTGGCTACTGAAGCTGCTCCGGGACATCCAGTTGGCC
CAGTTTTACTGGCCCATCCTTGAGGAGCTTAATGTCACTCGGCCAGAGCACTTCGACTTT
GTAAAGCCTGAGGACCTGGACGGCATTGGCATGGGCCGGCCTGCCCAGCGCAGACTGTCC
GAAGCTCTGAAAAGGCTACGTTCTGGGCCTAAGTCTAAGAACTGGGTCTACAAGATCCTT
GGAGGTTTTGCCCCTGAGCACAAGGAGCCCACCCTGCCCTCGGACAGCCCACGGCACCTC
CCTGAGCCAGAGGGGGGCCTCAAGTGTCTGATCCCAGAGGGTGCTGTTTGCAGAGGGGAG
CTGCTGGGTTCAGGCTGCTTCGGTGTGGTGCACCGAGGGCTGTGGACGCTGCCCAGTGGC
AAGAGTGTCCCAGTGGCTGTCATGTCCCTCCGGGTAGGTCCCGAAGGCCCGATGGGCACA
GAACTGGGGGACTTCCTGCGAGAGGTATCGGTCATGATGAACTTGGAGCACCCACACGTG
CTGCGTCTGCACGGCCTTGTACTGGGCCAGCCTCTGCAGATGGTGATGGAGCTGGCGCCA
CTGGGCTCCCTGCACGCGCGCCTAACGGCCCCGGCCCCGACACCCCCGCTGCTCGTGGCC
CTGCTCTGCCTCTTCCTGCGGCAGCTGGCGGGAGCCATGGCGTACCTGGGGGCCCGCGGG
CTGGTGCACCGAGACCTCGCTACGCGCAACCTACTGCTGGCGTCGCCGCGCACCATCAAG
GTGGCTGACTTCGGGCTGGTGCGGCCTCTGGGCGGTGCCCGGGGCCGCTACGTCATGGGC
GGGCCCCGCCCTATCCCCTACGCCTGGTGTGCCCCAGAGAGCCTGCGCCACGGAGCCTTC
TCGTCTGCCTCGGACGTGTGGATGTTTGGGGTGACGCTGTGGGAGATGTTCTCCGGGGGC
GAGGAACCCTGGGCCGGGGTCCCACCGTACCTCATCCTGCAGCGGCTGGAGGACAGAGCC
CGGCTGCCTAGGCCTCCCCTCTGCTCCAGGGCCCTCTACTCCCTCGCCTTGCGCTGCTGG
GCCCCCCACCCTGCCGACCGGCCTAGCTTTTCCCACCTGGAGGGGCTGCTGCAAGAGGCC
GGGCCTTCGGAAGCATGTTGTGTGAGGGATGTCACAGAACCAGGCGCCCTGAGGATGGAG
ACTGGTGACCCCATCACAGTCATCGAGGGCAGCCCCGACTCCACAATCTGGAAGGGCCAG
AATGGTCGCACCTTCAAAGTGGGCAGCTTCCCAGCCTCGGCAGTGACGCTGGCAGATGCG
GGGGGCTTGCCAGCCACCCGTCCAGTCCACAGAGGCACCCCTGCCCGGGGAGATCAACAC
CCAGGAAGCATAGATGGAGACAGAAAGAAGGCAAATCTTTGGGATGCGCCCCCAGCACGG
GGCCAGAGGAGGAACATGCCCCTGGAGAGGATGAAAGGCATTTCCAGGAGTCTGGAGTCA
GTTCTGTCCCTCGGTCCTCGTCCCACAGGGGGTGGTTCAAGCCCCCCTGAAATTCGACAA
GCCAGAGCTGTGCCCCAGGGACCTCCAGGCCTGCCTCCACGCCCACCTTTATCCTCTAGC
TCTCCTCAGCCCAGCCAGCCCTCTAGGGAGAGGCTTCCCTGGCCCAAAAGAAAACCCCCA
CACAATCACCCCATGGGAATGCCTGGAGCCCGTAAAGCCGCTGCCCTCTCTGGAGGCCTC
TTGTCCGATCCTGAGTTGCAGAGGAAGATTATGGAGATGGAGCTGAGTGTGCATGGGGTC
ACCCACCAGGAGTGCCAGACAGCACTAGGAGCCACTGGGGGAGATGTGGTTTCTGCCATC
CGGAACCTCAAGGTAGATCAGCTCTTCCACCTGAGTAGCCGGTCCAGAGCTGACTGCTGG
CGCATCCTGGAGCATTACCAGTGGGACCTCTCAGCTGCCAGCCGCTATGTCCTGGCCAGG
CCCTGA

Clone variation with respect to NM_003985.3
21 c=>t;443 a=>t;1777 g=>a

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_003985 unedited
ACCGCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAA
CCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCTTGACCAGGTGGA
GCTGGAGACCTGGTCTCTCTAGGGCCTACCCTGAGCTCACCATCTGAAGGAGAGTGCCATCATCCTTAGG
AACTCCTTCTCCAGACATGCTTCCTGAGGCTGGCTCTCTGTGGCTACTGAAGCTGCTCCGGGACATCCAG
TTGGCCCAGTTTTACTGGCCCATCCTTGAGGAGCTTAATGTCACTCGGCCAGAGCACTTCGACTTTGTAA
AGCCTGAGGACCTGGACGGCATTGGCATGGGCCGGCCTGCCCAGCGCAGACTGTCCGAAGCTCTGAAAAG
GCTACGTTCTGGGCCTAAGTCTAAGAACTGGGTCTACAAGATCCTTGGAGGTTTTGCCCCTGAGCACAAG
AGCCCACCCTGCCCTCGGACAGCCCACGGCACCTCCCTGAGCCAGAGGGGGCCTCAAGTGTCTGATCCCA
GAGGGTGCTGTTTGCAGAGGGAGCTGCTGGGTTCAGCTGCTTCGTGTGTGCACCGAGGGCTGTGACGCTG
CCCAGTGCAGAGTGTCCAGTGGCTGTCATGTCCCTCCGGGTAGTCCCGAGCCCGATGGCAACAGACTGGG
GGACTTCTGCGGAAGGTTTCGTCATGATGAACTTGGAGCCACCCCACACTGCTGCGTCTGCACGCCTTTT
ACTGGCCAGCCTTTGCCAATGGTGATGGACTGGCGCCATGGCTCCCTGCCGCGCGCTACGCCCGCCGGAA
CCCCCGGTGTCTTGCCTGCTTGCTTTTCTGCGACTGGGGAACCATGGCTACCTGGACAAGCCTGTACGAC
CTTGTACCGCACCATGTGTGGTTGCCGGCGCACACATAAGGTGGCGTAATCTTCG

Kinase Domain Sequence:

>SC323530 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI refernce protein database, you can confirm the presence of the kinase-deficient mutation
GMGKCTGGATMTGCTGCTTCGGTGTGGTGCACCGAGGGCTGTGGACGCTGCCCAGTGGCAAGAGTGTCCC
AGTGGCTGTCATGTCCCTCCGGGTAGGTCCCGAAGGCCCGATGGGCACAGAACTGGGGGACTTCCTGCGA
GAGGTATCGGTCATGATGAACTTGGAGCACCCACACGTGCTGCGTCTGCACGGCCTTGTACTGGGCCAGC
CTCTGCAGATGGTGATGGAGCTGGCGCCACTGGGCTCCCTGCACG

Restriction Sites: Please inquire

ACCN: NM_003985

Insert Size: 2850 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).

OTI Annotation: This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell. 2008 May p536-548.

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_003985.1, NP_003976.1

RefSeq Size:	2771 bp
RefSeq ORF:	2001 bp
Locus ID:	8711
UniProt ID:	Q13470
Cytogenetics:	17p13.1
Domains:	pkinase, TyrKc, SH3, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	The protein encoded by this gene belongs to the tyrosine protein kinase family. Tyrosine protein kinases are important regulators of intracellular signal transduction pathways, mediating cellular proliferation, survival, and development. This gene is highly expressed in fetal tissues and at lower levels in few adult tissues, thus may function in signaling pathways utilized broadly during fetal development, and more selectively in adult tissues. It plays a negative regulatory role in the Ras-Raf1-MAPK pathway, and knockout mice have been shown to develop spontaneous tumors, suggesting a role as a tumor suppressor gene. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2011] Transcript Variant: This variant (2) uses an alternate in-frame acceptor splice site at an internal coding exon compared to variant 1. This results in a shorter isoform (2) missing a 5 aa protein segment compared to isoform 1.