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Product datasheet for SC323565

TLK2 (NM_006852) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TLK2 (NM_006852) Human Untagged Clone
Tag:	Tag Free
Symbol:	TLK2
Synonyms:	HsHPK; MRD57; PKU-ALPHA
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

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Fully Sequenced ORF:

>NCBI ORF sequence for NM_006852, the custom clone sequence may differ by one or more nucleotides

ATGATGGAAGAATTGCATAGCCTGGACCCACGACGGCAGGAATTATTGGAGGCCAGGTTTACTGGAGTAG
GTGTTAGTAAGGGACCACTTAATAGTGAGTCTTCCAACCAGAGCTTGTGCAGCGTCGGATCCTTGAGTGA
TAAAGAAGTAGAGACTCCCGAGAAAAAGCAGAATGACCAGCGAAATCGGAAAAGAAAAGCTGAACCATAT
GAAACTAGCCAAGGGAAAGGCACTCCTAGGGGACATAAAATTAGTGATTACTTTGAGTTTGCTGGGGGAA
GCGCGCCAGGAACCAGCCCTGGCAGAAGTGTTCCACCAGTTGCACGATCCTCACCGCAACATTCCTTATC
CAATCCCTTACCGCGACGAGTAGAACAGCCCCTCTATGGTTTAGATGGCAGTGCTGCAAAGGAGGCAACG
GAGGAGCAGTCTGCTCTGCCAACCCTCATGTCAGTGATGCTAGCAAAACCTCGGCTTGACACAGAGCAGC
TGGCGCAAAGGGGAGCTGGCCTCTGCTTCACTTTTGTTTCAGCTCAGCAAAACAGTCCCTCATCTACGGG
ATCTGGCAACACAGAGCATTCCTGCAGCTCCCAAAAACAGATCTCCATCCAGCACAGACAGACCCAGTCC
GACCTCACAATAGAAAAAATATCTGCACTAGAAAACAGTAAGAATTCTGACTTAGAGAAGAAGGAGGGAA
GAATAGATGATTTATTAAGAGCCAACTGTGATTTGAGACGGCAGATTGATGAACAGCAAAAGATGCTAGA
GAAATACAAGGAACGATTAAATAGATGTGTGACAATGAGCAAGAAACTCCTTATAGAAAAGTCAAAACAA
GAGAAGATGGCGTGTAGAGATAAGAGCATGCAAGACCGCTTGAGACTGGGCCACTTTACTACTGTCCGAC
ACGGAGCCTCATTTACTGAACAGTGGACAGATGGTTATGCTTTTCAGAATCTTATCAAGCAACAGGAAAG
GATAAATTCACAGAGGGAAGAGATAGAAAGACAACGGAAAATGTTAGCAAAGCGGAAACCTCCTGCCATG
GGTCAGGCCCCTCCTGCAACCAATGAGCAGAAACAGCGGAAAAGCAAGACCAATGGAGCTGAAAATGAAA
CGTTAACGTTAGCAGAATACCATGAACAAGAAGAAATCTTCAAACTCAGATTAGGTCATCTTAAAAAGGA
GGAAGCAGAGATCCAGGCAGAGCTGGAGAGACTAGAAAGGGTTAGAAATCTACATATCAGGGAACTAAAA
AGGATACATAATGAAGATAATTCACAATTTAAAGATCATCCAACGCTAAATGACAGATATTTGTTGTTAC
ATCTTTTGGGTAGAGGAGGTTTCAGTGAAGTTTACAAGGCATTTGATCTAACAGAGCAAAGATACGTAGC
TGTGAAAATTCACCAGTTAAATAAAAACTGGAGAGATGAGAAAAAGGAGAATTACCACAAGCATGCATGT
AGGGAATACCGGATTCATAAAGAGCTGGATCATCCCAGAATAGTTAAGCTGTATGATTACTTTTCACTGG
ATACTGACTCGTTTTGTACAGTATTAGAATACTGTGAGGGAAATGATCTGGACTTCTACCTGAAACAGCA
CAAATTAATGTCGGAGAAAGAGGCCCGGTCCATTATCATGCAGATTGTGAATGCTTTAAAGTACTTAAAT
GAAATAAAACCTCCCATCATACACTATGACCTCAAACCAGGTAATATTCTTTTAGTAAATGGTACAGCGT
GTGGAGAGATAAAAATTACAGATTTTGGTCTTTCGAAGATCATGGATGATGATAGCTACAATTCAGTGGA
TGGCATGGAGCTAACATCACAAGGTGCTGGTACTTATTGGTATTTACCACCAGAGTGTTTTGTGGTTGGG
AAAGAACCACCAAAGATCTCAAATAAAGTTGATGTGTGGTCGGTGGGTGTGATCTTCTATCAGTGTCTTT
ATGGAAGGAAGCCTTTTGGCCATAACCAGTCTCAGCAAGACATCCTACAAGAGAATACGATTCTTAAAGC
TACTGAAGTGCAGTTCCCGCCAAAGCCAGTAGTAACACCTGAAGCAAAGGCGTTTATTCGACGATGCTTG
GCCTACCGAAAGGAGGACCGCATTGATGTCCAGCAGCTGGCCTGTGATCCCTACTTGTTGCCTCACATCC
GAAAGTCAGTCTCTACAAGTAGCCCTGCTGGAGCTGCTATTGCATCAACCTCTGGGGCGTCCAATAACAG
TTCTTCTAATTGA

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_006852 unedited
CCCGCCGTTCAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAA
CCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCGGCAGCAGAAATG
ATGGAAGAATTGCATAGCCTGGACCCACGACGGCAGGAATTATTGGAGGCCAGGTTTACTGGAGTAGGTG
TTAGTAAGGGACCACTTAATAGTGAGTCTTCCAACCAGAGCTTGTGCAGCGTCGGATCCTTGAGTGATAA
AGAAGTAGAGACTCCCGAGAAAAAGCAGAATGACCAGCGAAATCGGAAAAGAAAAGCTGAACCATATGAA
AACTAGCCAAGGGAAAGGCACTCCCTAGGGGACATAAAATTAGTGATTACTTTTGAGTTTGCTGGGGGAA
AGCCGCGCCAGGACCCAGCCCCTGCAGAGTTGTTCCCACCAGTTGCACGATCCCTCACCGGAACATTCTT
TATCCAATCCCTTACCGGCGACGAGTAGAACAGCCCCTTTATGTTTAGATGGCAGTGCTTGCAAAGGAGG
AAACGGAGGAACAGTCGGCTCGCACACCCTAAGGTAATTGATGCTACCAAACCCTCGCTTGCACCAGACG
CGCTGGCCAAGGGAACGGGCCCTGGCTTATTTTGTTAGCGCAGACAACCAGTCCTCATCACGGTTCTGCA
CACAGACCTCTCGCGCGCTCAAACAGATCCATCGAAGAGAAGACGTTCCATCTATTAAAATATTCGCCTG
AAACGTATTCGCTAGAAGGGAAATATGATTTAAACCCTTGTTGACGCATTGTACCCATGCTGAATCGACA
TACTGTACGTGACTTAAGATCCCAAAAGTGTATATGCAGCGAGTCTTAG

Kinase Domain Sequence:

>SC323565 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
AMGCTAAATGACAGATATTTGTTGTTACATCTTTTGGGTAGAGGAGGTTTCAGTGAAGTTTACAAGGCAT
TTGATCTAACAGAGCAAAGATACGTAGCTGTGATGATTCACCAGTTAAATAAAAACTGGAGAGATGAGAA
AAAGGAGAATTACCACAAGCATGCATGTAGGGAATACCGGATTCATAAAGAGCTGGATCATCCCARAATA
GTTAAGCTGTATGATTACTTTTCACTGGATACTGACTCGTTTTGT

Restriction Sites: Please inquire

ACCN: NM_006852

Insert Size: 3270 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_006852.2, NP_006843.2

RefSeq Size: 3616 bp

RefSeq ORF:	2253 bp
Locus ID:	11011
UniProt ID:	Q86UE8
Cytogenetics:	17q23.2
Domains:	pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	This gene encodes a nuclear serine/threonine kinase that was first identified in Arabidopsis. The encoded protein is thought to function in the regulation of chromatin assembly in the S phase of the cell cycle by regulating the levels of a histone H3/H4 chaperone. This protein is associated with double-strand break repair of DNA damage caused by radiation. Pseudogenes of this gene are present on chromosomes 10 and 17. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Sep 2013] Transcript Variant: This variant (A) lacks an alternate in-frame exon in the 3' coding region compared to variant C. The encoded protein (isoform A) is shorter than isoform C.