

Product datasheet for **SC323486**

MATK (NM_139355) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MATK (NM_139355) Human Untagged Clone
Tag:	Tag Free
Symbol:	MATK
Synonyms:	CHK; CTK; HHYLTK; HYL; HYLTK; Lsk
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC323486 sequence for NM_139355 edited (data generated by NextGen Sequencing)

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ATGGCGGGGCGAGGCTCTCTGGTTTCCTGGCGGGCATTTCACGGCTGTGATTCTGCTGAG
GAACTTCCCCGGGTGAGCCCCGCTTCCCTCCGAGCCTGGCACCCCCCTCCCGTCTCAGCC
AGGATGCCAACGAGGCGCTGGGCCCCGGCACCCAGTGTATCACCAAATGCGAGCACACC
CGCCCCAAGCCAGGGGAGCTGGCCTTCCGCAAGGGCGACGTGGTACCATCCTGGAGGCC
TGGGAAACAAGAGCTGGTACCGCGTCAAGCACACACCAGTGGACAGGAGGGGCTGCTG
GCAGCTGGGGCGCTGCGGGAGCGGGAGGCCCTCTCCGACACCCCAAGCTCAGCCTCATG
CCGTGGTTCCACGGGAAGATCTCGGGCCAGGAGGCTGTCCAGCAGCTGCAGCCTCCCGAG
GATGGGCTGTTCTGGTGCGGGAGTCCGCGCGCCACCCGGGACTACGTCTGTGCGTG
AGCTTTGGCCGCGACGTATCCACTACCGCGTGTGCACCGGACGGCCACCTCACAAATC
GATGAGGCCGTGTTCTTCTGCAACCTCATGGACATGGTGGAGCATTACAGCAAGGACAAG
GGCGCTATCTGCACCAAGCTGGTGGAGACAAAGCGAAACACGGGACCAAGTCGGCCGAG
GAGGAGCTGGCCAGGGCGGGCTGGTACTGAACCTGCAGCATTGACATTGGGAGCACAG
ATCGGAGAGGGAGAGTTTGGAGCTGTCTCGAGGGTGTGACCTGGGGCAAAGTGGCC
GTGAAGAATATCAAGTGTGATGTGACAGCCAGGCCTTCCCTGGACGAGACGGCCGTCATG
ACGAAGATGCAACACGAGAACCTGGTGCCTCTCCTGGGCGTGATCCTGCACACAGGGGCTG
TACATTGTGATGGAGCAGTGTGAGCAAGGGCAACCTGGTGAACCTTCTGCGGACCCGGGGT
CGAGCCCTCGTGAACACCGCTCAGCTCCTGCAGTTTTCTGACGTGGCCGAGGGCATG
GAGTACCTGGAGAGCAAGAAGCTTGTGCACCGGACCTGGCCGCCCGCAACATCCTGGTC
TCAGAGGACCTGGTGGCAAGGTGAGCGACTTTGGCCTGGCCAAAGCCGAGCGGAAGGGG
CTAGACTCAAGCCGGCTGCCCGTCAAGTGGACGGCGCCCGAGGCTCTCAACACGGGAAG
TTCACCAAGCAAGTCGGATGTCTGGAGTTTGGGGTGTCTGCTCTGGGAGGTCTTCTCATAT
GGACGGGCTCCGTACCCTAAAATGTCACTGAAAGAGGTGTCGGAGGCCGTGGAGAAGGGG
TACCGCATGGAACCCCCGAGGGCTGTCCAGGCCCGTGCACGTCTCATGAGCAGCTGC
TGGGAGGCAGAGCCCGCCCGCCGCCACCTTCCGCAAACCTGGCCGAGAAGCTGGCCCGG
GAGCTACGCAGTGCAGGTGCCCCAGCCTCCGTCTCAGGGCAGGACGCCGACGGCTCCACC
TCGCCCCGAAGCCAGGAGCCCTGA
    
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Clone variation with respect to NM_139355.2

5' Read Nucleotide Sequence: >OriGene 5' read for mutant NM_139355 unedited

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ACCGCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTAGTGAA
CCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGCAATTTCGGCACGAGGGGCCGGCGGGCG
GCGGGCGCGGAGGAGACCGCAGTGCGGCCGGCCTAGGACCCGCGGGGGCTCCAGGCCGCGGCGCCT
CGCGCTTCCCCACTCCCCGACCCTTCTCGCCCCAAAATGAGGAAACGGAGCAACTCGCTCCAAGTT
GTGCAGCCGGGACCGCCTCGGGGTGTGCAGCCGGGCTCGCGGAGGCCCTCCCTGGGGCGGGCGCCGGGG
CGCGGCTCGGGGGCCGCCCTGAGCCAAAACAGGAAAACAGCCTCCGGTCCAGTGGGCACCCCA
CCTCCCCCTACCCTCCGGTGAACCCGCTGGCCGGTGGCAGGCCTTCCACCGTCCCAACGGTAACCA
CTTGCAAGTTGGCCTTCCCCGCTCATTTCCTTCGGGGCCCAATGCCGGGCCAACCTCTGGGTTTC
CGGGGGGATTACCGGTGGGAATTTGCGGGGAACTTCCCGGGGAGCCCCGCTTCTCCAAACGGACCC
CCCCCGTTAAACGATACCACAAAGCCGGGGCCCGCCCCCAGTGTACCCATACGCACCCCTCCAAA
CGAGAGAGGCGCCTCAAGGGGAGTGAACCTTAGAGCGGAGAGACGAGCGAGCGACTGCCACCCCC
    
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Kinase Domain Sequence: >SC323486 kinase domain raw sequence. By performing [BLASTX](#) analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation

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CAMGGGCTGGTMTGACTGCAGCATTGACATTGGGAGCACAGATCGGAGAGGGAGAGTTTGGAGCTGTCC
TGCAGGGTGTGACTGGGGCAAAGGTGGCCGTGATGAATATCAAGTGTGATGTGACAGCCAGGCCTT
CCTGGACGAGACGGCCGTATGACGAAGATGCAACACGAGAACCTGGTGCCTCTCCTGGGCGTGATCCTG
CACCAGGGGCTGTACATTGTGATGGAGCACGTGAGCAAGGGCAAC
    
```

Restriction Sites: Please inquire

ACCN:	NM_139355
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:	<ol style="list-style-type: none">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_139355.1 , NP_647612.1
RefSeq Size:	2183 bp
RefSeq ORF:	1524 bp
Locus ID:	4145
UniProt ID:	P42679
Cytogenetics:	19p13.3
Protein Families:	Druggable Genome, Protein Kinase, Stem cell - Pluripotency
Gene Summary:	<p>The protein encoded by this gene has amino acid sequence similarity to Csk tyrosine kinase and has the structural features of the CSK subfamily: SRC homology SH2 and SH3 domains, a catalytic domain, a unique N terminus, lack of myristylation signals, lack of a negative regulatory phosphorylation site, and lack of an autophosphorylation site. This protein is thought to play a significant role in the signal transduction of hematopoietic cells. It is able to phosphorylate and inactivate Src family kinases, and may play an inhibitory role in the control of T-cell proliferation. This protein might be involved in signaling in some cases of breast cancer. Three alternatively spliced transcript variants that encode different isoforms have been described for this gene. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (1) encodes the predominant isoform a.</p>