

## Product datasheet for **SC303188**

### **MATK (NM\_002378) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MATK (NM_002378) Human Untagged Clone
Tag:	Tag Free
Symbol:	MATK
Synonyms:	CHK; CTK; HHYLTk; HYL; HYLTk; Lsk
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >SC303188 representing NM\_002378.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCAGGGACATTTCCCTGCTGAACGAAGAAGGCAGACCTCGGCGAGGGACCCGTGGTCAGCAGCAG
CTTCTGGTGAGCCCCCGCTTCTCCGAGCCTGGCACCCCTCCCGTCTCAGCCAGGATGCCAACGAGG
CGCTGGGCCCCGGGCACCCAGTGTATCACCAAATGCGAGCACACCCGCCCAAGCCAGGGGAGCTGGCC
TTCCGCAAGGGCGACGTGGTCACCATCTGGAGGCCTGCGAGAACAAGAGCTGGTACCGCGTCAAGCAC
CACACCACTGGACAGGAGGGGCTGCTGGCAGCTGGGGCGCTGCGGAGCGGGAGGCCCTCTCCGACAGC
CCCAAGCTCAGCCTCATGCCGTGGTTCACGGGAAGATCTCGGGCCAGGAGGCTGTCCAGCAGCTGCAG
CCTCCCGAGGATGGGCTGTTCTGGTGCGGGAGTCCGCGCGCCACCCGGCGACTACGTCCTGTGCGTG
AGCTTTGGCCGCGACGTCACTACCTACCGCGTGTGCACCGCGACGGCCACCTCACAATCGATGAGGCC
GTGTTCTTCTGCAACCTCATGGACATGGTGAGCATTACAGCAAGGACAAGGGCGCTATCTGCACCAAG
CTGGTGAGACCAAGCGGAAACACGGGACCAAGTCGGCCGAGGAGGAGCTGGCCAGGGCGGGCTGGTTA
CTGAACCTGCAGATTTGACATTGGGAGCACAGATCGGAGAGGGAGAGTTTGGAGCTGTCTGCAGGGT
GAGTACCTGGGGCAAAAGGTGGCCGTGAAGAATATCAAGTGTGATGTGACAGCCAGGCCCTTCTGGAC
GAGACGGCCGTGATGACGAAGATGCAACACGAGAACCTGGTGCCTCTCTGGGCGTGATCTGCACCAG
GGGCTGTACATTGTGATGGAGCAGTGAGCAAGGGCAACCTGGTGAACCTTCTGCGGACCCGGGGTCTGA
GCCCTCGTGAACACCGCTCAGCTCCTGCAGTTTTCTCTGCACGTGGCCGAGGGCATGGAGTACCTGGAG
AGCAAGAAGCTTGTGACCGCGACCTGGCCGCCGCAACATCTGGTCTCAGAGGACCTGGTGGCCAAG
GTCAGCGACTTTGGCTGGCCAAAGCCGAGCGGAAGGGGCTAGACTCAAGCCGGCTGCCCGTCAAGTGG
ACGGCGCCCGAGGCTCTCAAACACGGGAAGTTCACCAGCAAGTCGGATGTCTGGAGTTTTGGGGTCTG
CTCTGGGAGGTCTTCTCATATGGACGGGCTCCGTACCCTAAAATGTCACTGAAAGAGGTGTCGGAGGCC
GTGGAGAAGGGTACCGCATGGAACCCCCGAGGGCTGTCCAGGCCCCGTGCACGTCCTCATGAGCAGC
TGCTGGGAGGCAGAGCCCGCCCGCCGCCACCTTCCGCAAACTGGCCGAGAAGCTGGCCCGGGAGCTA
CGCAGTGCAAGTGCCCGAGCCTCCGTCTCAGGGCAGGACGCCGACGGCTCCACCTCGCCCCGAAGCCAG
GAGCCCTGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
  
```

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_002378

**Insert Size:** 1527 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u>NM_002378.3</u>
<b>RefSeq Size:</b>	2104 bp
<b>RefSeq ORF:</b>	1527 bp
<b>Locus ID:</b>	4145
<b>UniProt ID:</b>	<u>P42679</u>
<b>Cytogenetics:</b>	19p13.3
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Stem cell - Pluripotency
<b>MW:</b>	56.8 kDa
<b>Gene Summary:</b>	<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 (2) contains an alternate region at the 5' end of the coding region and lacks two exons in the coding region, as compared to variant 1. The encoded isoform b has a slightly longer and unique N-terminus compared to isoform a.</p>