

Product datasheet for **RG200454**

MATK (NM_139354) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MATK (NM_139354) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MATK
Synonyms:	CHK; CTK; HHYLTk; HYL; HYLTk; Lsk
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG200454 representing NM_139354
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGGGCGAGGCTCTCTGGTTTCTGGCGGGCATTTCACGGCTGTGATTCTGCTGAGGAACTCCCC
 GGGTGAGCCCCCGCTTCCCTCCGAGCCTGGCACCCCTCCCGTCTCAGCCAGGATGCCAACGAGGCCTG
 GGCCCCGGGACCCAGTGTATCACCAAATGCGAGCACACCCGCCCAAGCCAGGGGAGCTGGCCTCCGC
 AAGGGCGACGTGGTCACCATCTGGAGGCTGCGAGAACAAGAGCTGGTACCGCGTCAAGCACCACCA
 GTGGACAGGAGGGGCTGCTGGCAGCTGGGGCGCTGCGGGAGCGGGAGGCCCTCTCCGAGACCCCAAGCT
 CAGCCTCATGCCGTGGTCCACGGGAAGATCTCGGGCCAGGAGGCTGTCCAGCAGCTGCAGCCTCCCGAG
 GATGGGCTGTTCTGGTGGGAGTCCGCGGCCACCCCGCGACTACGTCTGTGCGTGAGCTTTGGCC
 GCGACGTCATCCACTACCGGTGCTGCACCGCGACGGCCACCTACAATCGATGAGGCCGTGTTCTTCTG
 CAACCTCATGGACATGGTGGAGCATTACAGCAAGGACAAGGGCGCTATCTGCACCAAGCTGGTGAGACCA
 AAGCGGAAACACGGGACCAAGTCGGCCGAGGAGGAGCTGGCCAGGGCGGGCTGGTACTGAACCTGCAGC
 ATTTGACATTGGAGCACAGATCGGAGAGGGAGAGTTGGAGCTGTCTGCAGGGTGAGTACCTGGGGCA
 AAAGGTGGCCGTGAAGAATATCAAGTGTGATGTGACAGCCAGGCCTTCTGGACGAGACGGCCGTGATG
 ACGAAGATGCAACACGAGAACCTGGTGCCTCTCTGGCGTGATCCTGCACAGGGGCTGTACATTGTCA
 TGGAGCACGTGAGCAAGGGCAACCTGGTGAACCTTCTGCGGACCCGGGGTTCGAGCCCTCGTGAACCCGC
 TCAGCTCCTGCAGTTTCTGACGTGGCCGAGGGCATGGAGTACCTGGAGAGCAAGAAGCTTGTGCAC
 CGCGACCTGGCCCGCCGAACATCTGGTCTCAGAGGACCTGGTGGCCAAGGTGAGCAGCTTTGGCCTGG
 CCAAAGCCGAGCGGAAGGGGCTAGACTCAAGCCGGCTGCCGTCAAGTGGACGGCCCGAGGCTTCAA
 ACACGGGAAGTTCACAGCAAGTCGGATGTCTGGAGTTTGGGGTGTGCTCTGGGAGGCTTCTCATAT
 GGACGGGCTCCGTACCCTAAAATGCTACTGAAAGAGGTGTCGGAGGCCGTGGAGAAGGGGTACCGCATGG
 AACCCCCGAGGGCTGTCCAGGCCCGTGCACGTCTCATGAGCAGCTGTGGGAGGCAGAGCCCGCCCG
 CCGGCCACCTTCCGCAAACTGGCCGAGAAGCTGGCCCGGAGCTACGCAGTGCAGGTGCCCCAGCCTCC
 GTCTCAGGGCAGGACGCCGACGGCTCCACCTCGCCCCGAAGCCAGGAGCCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG200454 representing NM_139354
 Red=Cloning site Green=Tags(s)

MAGRSLVSWRAFHGCDSEELPRVSPRFLRAWHPPPVSARMPTRRWAPGTQCITKCEHTRPKPELAFR
 KGDVVITILEACENKSWYRVKHHSTSGQEGLLAAGALREREALSDPKLSLMPWFHKGISGQEAQQLPPE
 DGLFLVRESARHPGDYVLCVSFGRDVIHYRVLHRDGHLTIDEAVFFCNLMDMVEHYSKDKGAICTKLVRP
 KRKHGKSAEEELARAGWLLNLQHLTLGAQIGEGEFGAVLQGEYLGQKVAVKNIKCDVTAQAFLEDTAVM
 TKMQHENLVRLLGVILHQGLYIVMEHVSKGNLVNFLRTRGRALVNTAQLLQFSLHVAEGMEYLESKKLVH
 RDLAARNILVSEDLVAKVSDFGLAKAERKGLDSSRLPVKWTAPEALKHGKFTSKSDVWSFGVLLWEVFSY
 GRAPYPKMSLKEVSEAVEKGYRMEPPEGCPGVHVMSSCWEAEPARRPPFRKLAEKLARELRSAGAPAS
 VSGQDADGSTSPRSQEP

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_139354

ORF Size: 1521 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_139354.2](#), [NP_647611.1](#)

RefSeq Size: 1940 bp

RefSeq ORF: 1401 bp

Locus ID: 4145

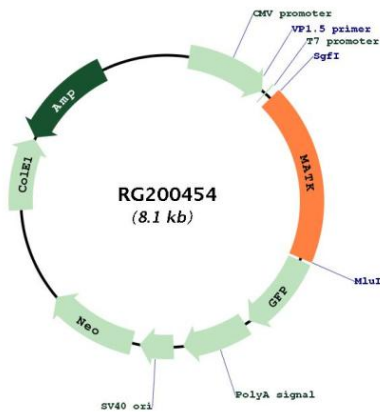
UniProt ID: [P42679](#)

Cytogenetics: 19p13.3

Protein Families: Druggable Genome, Protein Kinase, Stem cell - Pluripotency

Gene Summary: 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]

Product images:



Circular map for RG200454