

Product datasheet for **RG219394**

LATS2 (NM_014572) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LATS2 (NM_014572) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LATS2
Synonyms:	KPM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG219394 representing NM_014572 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGGCCAAAGACTTTTCTGCCACGACTTATTCTGAAATAGCCGGCAGCGACTGCAAGAGATTCGTG
AGGGGTTAAACAGCCATCCAAGTCTTCGGTTCAGGGGCTACCCGCAGGACCAAACAGTGACACTTCCCT
GGATGCCAAAGTCTGGGAGCAAAGATGCCACCAGGCAGCAGCAGATGAGAGCCACCCAAAGTTC
GGACCTATCAGAAAGCCTTGAGGGAAATCAGATATTCTTGTTCCTTTGCTAATGAATCGGGCACCT
CTGCAGCTGCAGAAGTGAACCGCAAATGCTGCAGGAAGTGGTGAACGCAGGATGCGACCAGGAGATGGC
TGGCCGAGCTCTCAAGCAGACTGGCAGCAGGAGCATCGAGGCCGCCCTGGAGTACATCAGCAAGATGGGC
TACCTGGACCCGAGGAATGAGCAGATTGTGCGGGTCATTAAGCAGACCTCCCCAGGAAAGGGGCTCATGC
CAACCCAGTGACGCGGAGGCCAGCTTCAAGGAACCGGCGATTTCGTTGCGTCTACCACCAGCTGAG
CGGTACCCCTACGAGGGCCCAAGCTTCGGCGCTGACGGCCCCACGGCGCTGGAGGAGATGCCGCGGCCG
TACGTGGACTACCTTTCCCGGAGTCGGCCCCACGGGCCCGGCCACCAGCACCAGCACCACCCAAAGG
GCTACGGTGCCAGCGTAGAGGCAGCAGGGGCACACTTCCCCTGCAGGGCGCGCACTACGGGCGGCCGCA
CCTGCTGGTGCCTGGGAACCCCTGGGCTACGGAGTGCAGCGCAGCCCTCCTTCCAGAGCAAGACGCCG
CCGGAGACCGGGGTTACGCCAGCCTGCCACGAAGGGCCAGGGAGGACCAGGCCCGGCCCTCGCTCGTT
TCCCACCCCTGCCGCGGGCTCTACGTGCCGCACCCACACACAAGCAGGCCGGTCCCAGGCCCCACCA
GCTGCATGTGCTGGGCTCCCGCAGCCAGGTGTTGCCAGCGACAGCCCCCGCAGAGCCTGCTCACTCCC
TCGCGAACAGCCTCAACGTGGACCTGTATGAATTGAGCAGCACCTCCGTCAGCAGTGGCCGGCTGCCA
CCCTGGCCCGCCGGGACTCCCTGCAGAAGCCGGGCTGGAGGCGCCGCGCGCACGTGGCCTTCCG
GCCTGACTGCCAGTGCCAGCAGGACCAACTCCTTCAACAGCCACCAGCCGCGGCCCGTCCGCTGGC
AAGGCCGAGCCCTCCCTGCCGCCCCCAACACCGTGACGGCTGTCAGGGCCGCGCACATCTGCACCCGG
TGAAGAGCGTGCTGTGCTGAGGCCGAGCCGACAGCGGCTGTGGGGCCCTCGCACCCCGCTGGGTGCC
CGCGCTGCCCGGCCCGCCCGCCCGCCCGGCTGCGGAGGGCTTGACGCCAAGGAGGAGCAT



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GCCCTGGCGCTGGGCGGCGCAGGCGCCTTCCCCTGGACGTGGAGTACGGAGGCCAGACCGGAGGTGCC
 CGCTCCGCCCTACCCGAAGCACCTGCTGCTGCCAGCAAGTCGGAGCAGTACGACCTGGACAGCCTGTG
 CGCAGGCATGGAGCAGAGCCTCCGTGCGGGCCCAACGAGCCGAGGGCGGCGACAAGAGCCGAAAAAGC
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 CAAAGGTACTCAACTCTGTGACTGGTGGAGTGTGGAGTATTCTCTTCGAGATGCTGGTGGGGCAG
 CCGCCCTTTTGGCACCTACTCCACAGAAACCCAGCTGAAGGTGATCAACTGGGAGAACACGCTCCACA
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 CCGCTGGGGCGGAATGGGGCCGATGACCTGAAGGCCACCCCTTCTTACGCGCATTGACTTCTCCAGT
 GACATCCGGAAGCAGCCAGCCCTACGTTCCACCATCAGCCACCCCATGGACACCTCGAATTCGACC
 CCGTAGATGAAGAAAGCCCTTGAACGATGCCAGCGAAGGTAGCACCAAGGCTGGGACACACTCACCTC
 GCCAATAACAAGCATCCTGAGCAGCATTTTACGAATTCACCTTCCGAAGGTTCTTTGATGACAATGGC
 TACCCCTTTCGATGCCAAAGCCTTACGAGCAGAAGCTTACAGGCTGAGAGCTCAGATTTAGAAAGCT
 CTGATCTGGTGGATCAGACTGAAGGCTGCCAGCCTGTGTACGTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG219394 representing NM_014572
 Red=Cloning site Green=Tags(s)

MRPKTFPATTYSGNSRQRLQEIREGLKQPSKSSVQGLPAGPNSDTSLDAKVLGSKDATRQQQMRATPKF
 GPYQKALREIRYSLLPFANESGTSAAAENRQMLQELVNAGCDQEMAGRALKQTGSRSEIAALEYISKMG
 YLDPRENIQVVRVQKQTSQKGLMPTVTRRPSFEGTGDSFASYHQLSGTPYEGPSFGADGPTALEEMPRP
 YVDYLFPGVGPVGHQHQHPPKGYGASVEAAGAHFPLQGAHYGRPHLLVPGEPLGYGVQSPFSQSKTP
 PETGGYASLPTKQGGPPGAGLAFPPPAAGLYVPHPHKQAGPAHQHLVLSRSQVFAASDPPQSLLTP
 SRNSLNVDLYELSSVQQWPAATLARRDSLQKPLEAPPRAHVAFRPPDCVPSRTNSFNHQPRGPPG
 KAEPSPAPNTVTAVTAAHILHPVKSVRVLRPEPQTAVGPSHPAWVPAPAPAPAPAPAAEGLDAKEEH
 ALALGGAGAFPLDVEYGGPDRRCPPPPYPKHLLLRKSEQYDLDLSCAGMEQSLRAGPNEPEGGDKSRKS
 AKGDKGGKDKKQIQTSVPVVRKNSRDEEKRESRIKSYSPYAFKFFMEQHVENVIKTYQQVNRRLQLEQE
 MAKAGLCEAEQEQMRKILYQKESNYNRLKRAKMDKSMFVKIKTLGIGAFGEVCLACKVDTHALYAMKTLR
 KKDVLNRNQVHVKAERDILAEADNEWVVKLYYSFQDKDSL YFVMDYIPGGDMSLLIRMEVFPEHLARF
 YIAELTLAIESVHKMGFIHRDIKPDNILIDLGHIKLTDGLCTGFRWTHNSKYQKGSVHRQDSMEPSD
 LWDDVSNCRCDRLKTLERARKQHQRCLAHSLVGTPTYIAPEVLLRKGTYQLCDWWSVGVILFEMLVGQ
 PPFLAPTPTETQLKVINWENTLHIPAQVKLSPEARLDITKLCCSADHRLGRNGADDLKAHPFFSAIDFSS
 DIRKQAPYPVPTISHPMDTSNFDVDEESPWINDASEGSTKAWDTLTSNNKHPEHAFYEFTRRRFFDDNG
 YPFRCPKPSGAEASQAESSDLESSLVDQTEGCQPVVY

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_014572

ORF Size: 3264 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_014572.1](#), [NP_055387.1](#)

RefSeq Size: 4098 bp

RefSeq ORF: 3267 bp

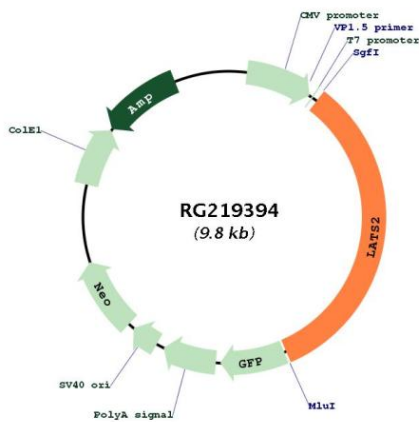
Locus ID: 26524

UniProt ID: [Q9NRM7](#)

Cytogenetics: 13q12.11
Domains: UBA, pkinase, S_TK_X, TyrKc, S_TKc
Protein Families: Druggable Genome, Protein Kinase

Gene Summary: This gene encodes a serine/threonine protein kinase belonging to the LATS tumor suppressor family. The protein localizes to centrosomes during interphase, and early and late metaphase. It interacts with the centrosomal proteins aurora-A and ajuba and is required for accumulation of gamma-tubulin and spindle formation at the onset of mitosis. It also interacts with a negative regulator of p53 and may function in a positive feedback loop with p53 that responds to cytoskeleton damage. Additionally, it can function as a co-repressor of androgen-responsive gene expression. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG219394