

Product datasheet for RC219394

LATS2 (NM_014572) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: LATS2 (NM_014572) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: LATS2
Synonyms: KPM
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC219394 representing NM_014572
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGGCCAAAGACTTTTCTGCCACGACTTATTCTGAAATAGCCGGCAGCGACTGCAAGAGATTCGTG
 AGGGGTTAAAGCAGCCATCCAAGTCTTCGGTTCAGGGGCTACCCGCAGGACCAAACAGTGACACTTCCCT
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 CTGCAGCTGCAGAAGTGAACCGCAAATGCTGCAGGAAGTGGTGAACGCAGGATGCGACCAGGAGATGGC
 TGGCCGAGCTCTCAAGCAGACTGGCAGCAGGAGCATCGAGGCCGCCCTGGAGTACATCAGCAAGATGGGC
 TACCTGGACCCGAGGAATGAGCAGATTGTGCGGGTCATTAAGCAGACCTCCCCAGGAAAGGGGCTCATGC
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GCCCTGGCGCTGGGCGGCGCAGGCGCCTTCCCCTGGACGTGGAGTACGGAGGCCAGACCGGAGGTGCC
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Protein Sequence:

>RC219394 representing NM_014572
 Red=Cloning site Green=Tags(s)

MRPKTFPATTYSNGSRQRLQEIREGLKQPSKSSVQGLPAGPNSDTSLEDAKVLGSKDATRQQQMRATPKF
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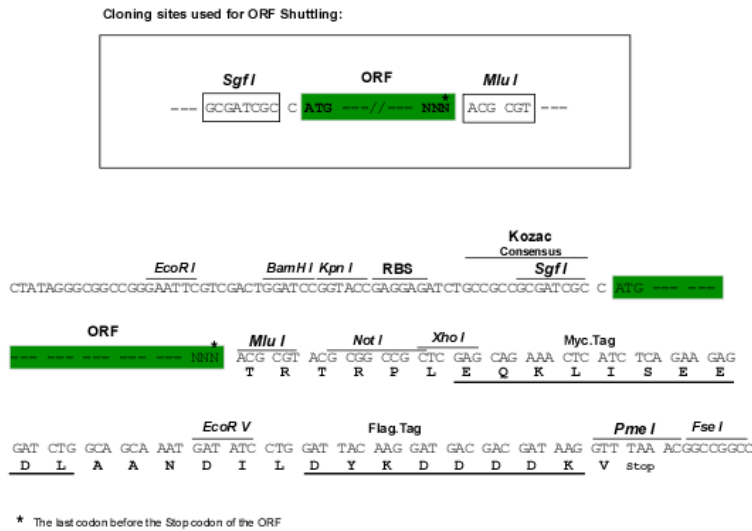
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2585_a09.zip

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_014572.3](#)

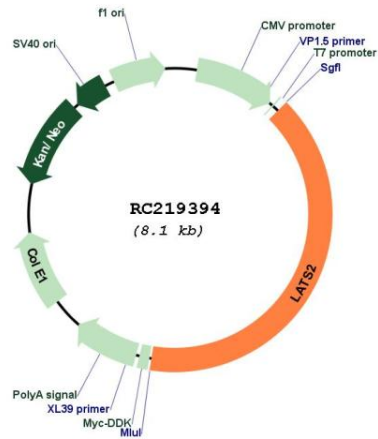
RefSeq Size: 4098 bp

RefSeq ORF: 3267 bp

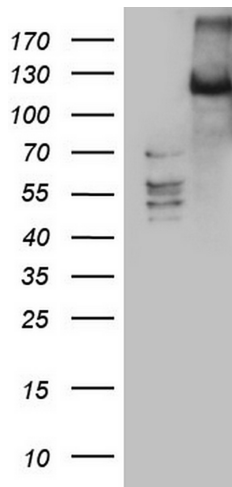
Locus ID: 26524
UniProt ID: [Q9NRM7](#)
Cytogenetics: 13q12.11
Domains: UBA, pkinase, S_TK_X, TyrKc, S_TKc
Protein Families: Druggable Genome, Protein Kinase
MW: 120 kDa

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]

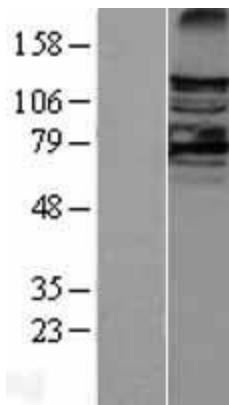
Product images:



Circular map for RC219394



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY LATS2 (Cat# RC219394, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-LATS2 (Cat# [TA804435]). Positive lysates [LY402348] (100ug) and [LC402348] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402348]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219394 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).