

## Product datasheet for **MC209854**

### Lats2 (NM\_153382) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Lats2 (NM\_153382) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Lats2  
**Synonyms:** 4932411G09Rik; AV277261; AW228608  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC209854 representing NM\_153382  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGAGGCCAAAGACTTTTCTGCCACACTTACTCTGGAATAGCCGGCAGCGATTGCAAGAGATTCGAG  
AGGGGCTGAAGCAGCCATCCAAGGCTTCCACCCAGGGGCTGCTGGTGGGACCAAACAGTGACACTCCCT  
GGATGCCAAAGTCTGGGAGCAAAGATGCCTCCAGGCAGCAGCAAATGAGAGCCACCCGAAGTTGGA  
CCTTATCAAAAAGCTCTCAGGAAATCCGATATTCCTCCTGCCTTTTGCCAACGAGTCAGGCACCTCGG  
CAGCTGCAGAGGTGAACCGGCAGATGCTTCAGGAGTTGGTGAATGCGGGATGTGACCAGATGCATATTCC  
TGGTGCCTGTCTGTTTCTGGAGATGCTCCTGTCTGTCCCTCCCATCTCCCAAACAGCAGCACCTGGATTA  
CAGGCACACAGGCTGCTACAGCTTTGCAGTGTGTGCGAATTCAAGCTCGGACCCTCACACTTGTACCTGA  
AGCACGGAGCCAGCCGTCTTCTCAGCCCCTTATGTCCA**TAA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_153382  
**Insert Size:** 531 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).



[View online »](#)

<b>Components:</b>	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><a href="#">NM_153382.1</a></u> , <u><a href="#">NP_700431.1</a></u>
<b>RefSeq Size:</b>	913 bp
<b>RefSeq ORF:</b>	531 bp
<b>Locus ID:</b>	50523
<b>Cytogenetics:</b>	14 C3
<b>Gene Summary:</b>	<p>Negative regulator of YAP1 in the Hippo signaling pathway that plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis. The core of this pathway is composed of a kinase cascade wherein STK3/MST2 and STK4/MST1, in complex with its regulatory protein SAV1, phosphorylates and activates LATS1/2 in complex with its regulatory protein MOB1, which in turn phosphorylates and inactivates YAP1 oncoprotein and WWTR1/TAZ. Phosphorylation of YAP1 by LATS2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration. Acts as a tumor suppressor which plays a critical role in centrosome duplication, maintenance of mitotic fidelity and genomic stability. Negatively regulates G1/S transition by down-regulating cyclin E/CDK2 kinase activity. Negative regulator of the androgen receptor. Phosphorylates SNAI1 in the nucleus leading to its nuclear retention and stabilization, which enhances its epithelial-mesenchymal transition and tumor cell invasion/migration activities. This tumor-promoting activity is independent of its effects upon YAP1 or WWTR1/TAZ (By similarity).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (B) lacks the first exon, most of the 3' coding region and uses a different terminal exon compared to variant A. The resulting protein (isoform 2, also called LATS2B) is much shorter and has a distinct C-terminus when it is compared to isoform 1.</p> <p>Sequence Note: The RefSeq transcript and protein were derived from transcript and genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.</p>