

Product datasheet for **RG226745**

LSS (NM_001145437) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LSS (NM_001145437) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LSS
Synonyms:	APMR4; CTRCT44; HYPT14; OSC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG226745 representing NM_001145437
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACGGAGGGCACGTGTCTGCGCGCCGAGGGGGCCCCTACAAGACCGAGCCCGCCACCGACTCGGCC
 GCTGGCGACTCAACTGCGAGAGGGGCGGCAGACGTGGACCTACCTGCAGGACGAGCGCGCCGGCCGCA
 GCAGACCGGCCTGGAAGCCTACGCCCTGGGGCTGGACACCAAGAATTACTTTAAGGACTTGCCCAAAGCC
 CACACCGCCTTTGAGGGGGCTCTGAACGGGATGACATTTTACGTGGGGCTGCAGGCTGAGGATGGGCACT
 GGACGGGTGATTATGGTGGCCACTTTTCTCCTGCCAGGCCCTCCTGATCACTTGCCACGTGGCACGCAT
 CCCTCTGCCAGCCGATACAGAGAAGAGATTGTGCGGTACCTGCGGTAGTGCAGCTCCCTGACGGTGGC
 TGGGGCCTGCACATTGAGGATAAGTCCACCGTGTGGGACTGCGCTCAACTATGTGTCTCTCAGAATTC
 TGGGTGTTGGGCCTGACGATCCTGACCTGGTACGAGCCCGGAACATTCTCACAAGAAAGGTGGTGTGT
 GGCCATCCCTCCTGGGGAAAGTTCTGGCTGGCTGCTGAATGTTTACAGCTGGGAAGGCCCTCAATACC
 CTGTTCCAGAGATGTGGCTGTTTCTGACTGGGCACCGGCACACCCCTCCACACTCTGGTGCCACTGCC
 GGCAGGTGACTGCCCCATGAGCTACTGCTACGCCGTTTCGGCTGAGTGCCGCGGAAGACCCGCTGGTCCA
 GAGCCTCCGCCAGGAGCTCTATGTGGAGGACTTCGCCAGCATTGACTGGCTGGCGCAGAGGAACAACGTG
 GCCCCGACGAGCTGTACACGCCCCACAGCTGGCTGCTCCGCGTGGTATATGCGCTCCTCAACCTGTATG
 AGCACCACCACAGTGCCACCTGCGGCAGCGGGCCGTGCAGAAGCTGTATGAACACATTGTGGCCGACGA
 CCGATTCACCAAGAGCATCAGCATCGGCCCGATCTCGAAAACCATCAACATGCTTGTGCGCTGGTATGTG
 GACGGGCCCGCCTCCACTGCCTCCAGGAGCATGTCTCCAGAATCCCGGACTATCTTGATGGCCTTG
 ACGGCATGAAAAATGCAGGGCACCAACGGCTCACAGATCTGGACACCGCATTCGCCATCCAGGCTGTGCT
 TGAGGCGGGCGGCACACAGGCCCGAGTTTTCTGCTCCTGCAGAAAGGCTCATGAGTTCCTGAGGCTC
 TCACAGGTCCCAGATAACCCTCCGACTACCAGAAGTACTACCGCCAGATGCGCAAGGGTGGCTTCTCCT
 TCAGTACGCTGGACTGCGGCTGGATCGTTTCTGACTGCACGGCTGAGGCCTTGAAGGCTGTGCTGCTCCT
 GCAGGAGAAGTGTCCCCATGTCACCGAGCACATCCCCAGAGAACGGCTCTGCGATGCTGTGGCTGTGCTG
 CTGAACATGAGAAATCCAGATGGAGGTTTCGCCACCTATGAGACCAAGCGTGGGGGGCACTTGTGGAGC
 TGCTGAACCCCTCGGAGTCTTCGGGGACATCATGATTGACTACACCTATGTGGAGTGCACCTCAGCCGT
 GATGCAGGCGCTTAAGTATTTCCACAAGCGTTTCCCGGAGCACAGGGCAGCGGAGATCCGGGAGACCCTC
 ACGCAGGGCTTAGAGTTCTGTCGGCGGCAGCAGAGGGCCGATGGCTCCTGGGAAGGCTCCTGGGGAGTTT
 GCTTACCTACGGCACCTGGTTTGGCCTGGAGGCCTTCGCTGTATGGGGCAGACCTACCGAGATGGGAC
 TGCTGTGCAGAGGTCTCCCGGGCTGTGACTTCTGCTGTCCCGGCAGATGGCAGACGGAGGCTGGGGG
 GAGGACTTTGAGTCTGCGAGGAGCGGCTTATGTGCAGAGTGCCAGTCCCAGATCCATAACACATGCT
 GGGCCATGATGGGGCTGATGGCCGTTCCGCATCCTGACATCGAGGCCCAGGAGAGAGGAGTCCGGTGTCT
 ACTTGAGAAACAGCTCCCCAATGGCGACTGGCCGAGGAAAACATTGCTGGGGTCTTCAACAAGTCTGT
 GCCATCTCTACACGAGCTACAGGAACATCTTCCCATCTGGGCCCTCGGCCGCTTCTCCAGCTGTACC
 CTGAGAGAGCCCTTGTGGCCACCCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG226745 representing NM_001145437
 Red=Cloning site Green=Tags(s)

MTEGTCLRRRGGPYKTEPATDLGRWRLNCERGRQTWTYLQDERAGREQTGLEAYALGLDTKNYFKDLPKA
 HTAFEGALNGMTFYVGLQAEDGHWTGDYGGPLFLLPGLLITCHVARIPLPAGYREEIVRYLRSVQLPDGG
 WGLHIEDKSTVFGTALNYVSLRILGVGPD PDLVRARNILHKKGGAVAIPSWGKFWLAVLNVYSWEGLNT
 LFPFEMWLFDPWAPHPSTLWCHCRQVYLPMSYCYAVRLSAAEDPLVQSLRQELYVEDFASIDWLAQRNNV
 APDELYTPHSWLLRVVYALLNL YEHHSAHLRQRAVQKLYEHIVADDRFTKISISIGPISKINMLVRWYV
 DGPASTAFQEHVSRIPDYLMWGLDGMKMQGTNGSQIWDTAFAIQALLEAGGHRPEFSSCLQKAHEFLRL
 SQVPDNPDPYQKYRQMRKGGFSFSTLDCGWI VSDCTAEALKAVLLLQEKCPHVTEHIPRERLCDAVAVL
 LNM RNP DGGFATYETKRGGHLELLNPSEVFGDIMIDYTYVECTSAVMQALKYFHKRPEHRAAEIRETL
 TQGLEFCRRQQRADGSWEGSWGVCFTYGTWFGLEAFACMGQTYRDGTACA EVSRACDFLLSRQMDGGWG
 EDFESCEERRYVQSAQSQIHNTCWAMMGLMAVRHPDIEAQERGVRCLEKQLPNGDWPQENIAGVFNKSC
 AISYTSYRNIFPIWALGRFSQLYPERALAGHP

TRTRPLE - GFP Tag - V

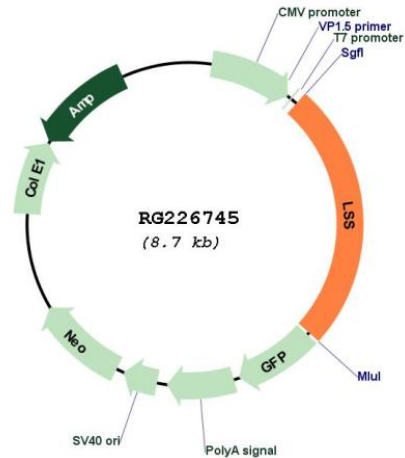
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001145437

ORF Size: 1956 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_001145437.1](#), [NP_001138909.1](#)

RefSeq Size: 4390 bp

RefSeq ORF: 1959 bp

Locus ID: 4047

UniProt ID:	<u>P48449</u>
Cytogenetics:	21q22.3
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Steroid biosynthesis
Gene Summary:	<p>The protein encoded by this gene catalyzes the conversion of (S)-2,3 oxidosqualene to lanosterol. The encoded protein is a member of the terpene cyclase/mutase family and catalyzes the first step in the biosynthesis of cholesterol, steroid hormones, and vitamin D. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Feb 2009]</p>