

## Product datasheet for **RG226713**

### LSS (NM\_001145436) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	LSS (NM_001145436) 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:**

>RG226713 representing NM\_001145436  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGACGGAGGGCACGTGTCTGCGGCGCCGAGGGGGCCCCTACAAGACCGAGCCCGCCACCGACTCGGCC  
 GCTGGCGACTCAACTGCGAGAGGGGCGCGCAGAGTGGACCTACCTGCAGGACGAGCGCGCCGGCCGCGA  
 GCAGACCGGCTTGAAGCCTACGCCCTGGGGCTGGACACCAAGAATTACTTTAAGGACTTGCCCAAAGCC  
 CACACCGCCTTTGAGGGGGCTCTGAACGGGATGACATTTTACGTGGGGCTGCAGGCTGAGGATGGGCACT  
 GGACGGGTGATTATGGTGGCCACTTTTCTCCTGCCAGGCCTCCTGATCACTTGCACGTGGCAGCAT  
 CCCTCTGCCAGCCGATACAGAGAAGAGATTGTGCGGTACCTGCGGCACATTGAGGATAAGTCCACCGTG  
 TTTGGGACTGCGCTCAACTATGTGTCTCTCAGAATTCTGGGTGTTGGGCTGACGATCCTGACCTGGTAC  
 GAGCCCGAACATTCTTACAAGAAAGGTGGTGTGTGGCCATCCCTCCTGGGGAAAGTCTGGCTGGC  
 TGTCTGAATGTTTACAGCTGGGAAGGCCTCAATACCCTGTTCCAGAGATGTGGCTGTTTCTGACTGG  
 GCACCGGCACACCCCTCCACACTCTGGTGCACCTGCCGGCAGGTGTACCTGCCATGAGCTACTGCTACG  
 CCGTTCGGCTGAGTGCCGCGGAAGACCCGCTGGTCCAGAGCCTCCGCCAGGAGCTCTATGTGGAGGACTT  
 CGCCAGCATTGACTGGCTGGCGCAGAGGAACAACGTGGCCCCGACGAGCTGTACACGCCGCACAGCTGG  
 CTGCTCCGCGTGTATATGCGCTCCTCAACCTGTATGAGCACCACCACAGTGCCACCTGCGGCAGCGGG  
 CCGTGCAGAAGCTGTATGAACACATTGTGGCCGACGACCGATTACCAAGAGCATCAGCATCGGCCCGAT  
 CTGAAAACCATCAACATGCTTGTGCGCTGGTATGTGGACGGGCCCGCCTCCACTGCCTTCCAGGAGCAT  
 GTCTCCAGAATCCCGACTATCTCTGGATGGCCCTTACGGCATGAAAATGCAGGGCACCAACGGCTCAC  
 AGATCTGGGACACCGCATTCGCCATCCAGGCTCTGCTTGGGCGGGCGGGCACCACAGCCCGAGTTTTTC  
 GTCTGCCTGCAGAAGGCTCATGAGTTCCTGAGGCTCTCACAGGTCCAGATAACCCTCCCGACTACCAG  
 AAGTACTACGCCAGATGCGCAAGGGTGGCTTCTCCTCAGTACGCTGGACTGCGGCTGGATCGTTTCTG  
 ACTGCACGGCTGAGGCCTTGAAGGCTGTGCTGCTCCTGCAGGAGAAGTGTCCCATGTCACCGAGCACAT  
 CCCCAGAGAACGGCTCTGCGATGCTGTGGCTGTGCTGCTGAACATGAGAAATCCAGATGGAGGGTTCGCC  
 ACCTATGAGACCAAGCGTGGGGGCACTTGTGGAGCTGCTGAACCCCTCGGAGGTCTTCGGGGACATCA  
 TGATTGACTACACCTATGTGGAGTGCACCTCAGCCGTGATGCAGGCGCTTAAGTATTTCCACAAGCGTTT  
 CCCGGAGCACAGGGCAGCGGAGATCCGGGAGACCCTCACGAGGGCTTAGAGTTCTGTGCGCGGCAGCAG  
 AGGGCCGATGGCTCCTGGGAAGGCTCCTGGGGAGTTTGTTCACCTACGGCACCTGGTTTGGCCTGGAGG  
 CCTTCGCCTGTATGGGGCAGACCTACCGAGATGGGACTGCCTGTGCAGAGGTCTCCCGGGCTGTGACTT  
 CCTGCTGTCCCGCAGATGGCAGACGGAGGCTGGGGGGAGGACTTTGAGTCTGCAGGAGCGGCGTTAT  
 TTGCAGAGTGCCAGTCCAGATCCATAACACATGCTGGGCCATGATGGGGCTGATGGCCGTTTCGGCATC  
 CTGACATCGAGGCCAGGAGAGAGGAGTCCGGTGTCTACTTGAGAAACAGCTCCCCAATGGCGACTGGCC  
 GCAGGAAAACATTGCTGGGGTCTTCAACAAGTCTGTGCCATCTCCTACACGAGCTACAGGAACATCTTC  
 CCCATCTGGGCCCTCGGCCGCTTCTCCAGCTGTACCCTGAGAGAGCCCTTGTGGCCACCCC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG226713 representing NM\_001145436  
 Red=Cloning site Green=Tags(s)

MTEGTCLRRRGGPYKTEPATDLGRWRLNCERGRQTWTYLQDERAGREQTGLEAYALGLDTKNYFKDLPKA  
 HTAFEGALNGMTFYVGLQAEDGHWTGDYGGPLFLLPGLLITCHVARIPLPAGYREEIVRYLRHIEDKSTV  
 FGTALNYVSLRILGVGPDDPDLVRARNILHKKGGAVAIPSWGKFWLAVLNVYSWEGLNTLFPBMWLPDW  
 APAHPSTLWCHCRQVYLPMSYCYAVRLSAAEDPLVQSLRQELVYEDFASIDWLAQRNNVAPDELYTPHSW  
 LLRVVYALLNLYEHHSALRQRAVQKLYEHIVADDRFTKISIGPISKTINMLVRWYVDGPASTAFQEH  
 VSRIPDYLMGLDGMKMQGTNGSQIWDTAFAIQALLEAGGHRPEFSSCLQKAHEFLRLSQVPDNPDPYQ  
 KYRQMRKGGFSFSTLDCGWIVSDCTAEALKAVLLLQEKCPHVTEHIPRERLCAVAVLLNMRNPDGGFA  
 TYETKRGHLELLNPSEVFGDIMIDYTYVECTSAVMQALKYFHKRFPEHRAAEIRETLTQGLEFCRRQQ  
 RADGSWEGSWGVCFTYGTWFGLEAFACMGQTYRDGTACAESRACDFLLSRQADGGWGEDFESCEERRY  
 LQSAQSQIHNTCWAMMGLMAVRHPDIEAQERGVRCLEKQLPNGDWPQENIAGVFNKSCAISYTSYRNIF  
 PIWALGRFSQLYPERALAGHP

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001145436

**ORF Size:** 2163 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\\_001145436.2](#)

**RefSeq Size:** 4225 bp

**RefSeq ORF:** 2166 bp

**Locus ID:** 4047

**UniProt ID:** [P48449](#)

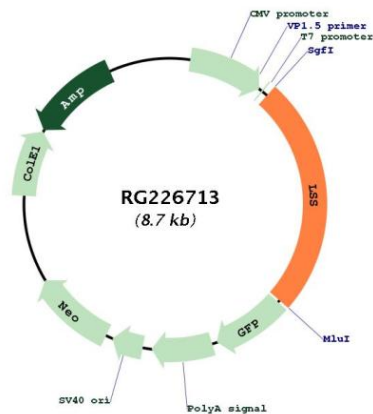
**Cytogenetics:** 21q22.3

**Protein Families:** Druggable Genome

**Protein Pathways:** Metabolic pathways, Steroid biosynthesis

**Gene Summary:** 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]

**Product images:**



Circular map for RG226713