

Product datasheet for MR211884

Scap (NM_001001144) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Scap (NM_001001144) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Scap
Synonyms:	9530044G19; mKIAA0199
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR211884 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACCCTGACTGAAAGGCTTCGTGAGAAGATATCTCAGGCCTTCTACAACCATGGGCTGCTCTGCGCAT
CCTATCCAATTCATCATCCTCTTACAGGACTCTGCATCTTAGCCTGCTGCTACCCGCTGCTGAAGCT
CCCCTTGCTGGAACGGGACCTGTGGAATTCTCCACGCCTGTGAAGGGTACTCGCCCCGCTGCGGAC
TCTGACCACAAACAAGGAGAGCCAGCGAGCAGCCAGAGTGGTATGTGGGTGCCCGTGGCGTACATCC
AACAGATATTTGTGAAGTCATCGGTGTCTCCCTGGCACAGAAATCTTCTGGCAGTCGATGTGTTCCGGTC
ACCTCTGTCCCGAGCATTCCAACCTGGTGAAGAGATCCGGAACCATGTGCTGAGAGACAGCTCAGGGACC
AAGAGCCTGGAGGAGTTTGCCTGCAGGTGACAGACCTGCTGCCAGGCCTCAGGAACTCCGGAGCCTAC
TTCCCGAACATGGCTGCCTGCTGCTGCCCTGGGAATCTTGGCAGAATGATTGGGAGAGATTCATGC
CGACCCTGACATCATTGGGACCATCCAATGAGCCAAAACCTACAGACATCAGCCACACTCAA
GACTTGCTGTTTGGTGTCTCGGAAAGTACAGTGGGGTGAAGCCTTACACAAGGAAAAGGATGGTCTCT
ACACCATACCCTGGTCTTCCAGCGCTACCATGCCAAGTTTCTGAGCAGCCTACGTGCCCGGCTCATGCT
GCTGCACCCAGCCCCAAGTGCAGCCTCCGAGCAGAGAACCTGGTCCACGTCCACTTCAAAGAGGAGATT
GGCATTGCTGAGCTCATCCCGCTCGTGACCACCTACATCATCTGTTTGCCTACATCTACTTCTCCACAC
GCAAGATCGACATGGTCAAGTCCAAGTGGGGCCTCGCCCTGGCAGCCGTGGTACAGTACTTAGCTCACT
GCTCATGTCTGTGGGCTCTGCACCCTTTCGGCCTGACGCCCACTCAATGGCGGTGAGATCTTCCCA
TACCTGGTGGTCGTTATTGGGCTAGAGAAGCTGTTGGTGTCCACCAAGTCAAGTGGTATCAACTCCAGTGG
ACCTCGAGGTGAAGCTTCGGATTGCACAAGGCTTGAGTAGTGAGAGCTGGTCCATCATGAAGAACGCGGC
GACCGAGCTGGGCATCATCCTATTGGCTACTTACCCTCGTGCCTGCTATCCAGGAGTTCTGCCTCTT
GCTGTTGTGGCCTGGTGTCTGACTTCTTCCAGATGCTGTTCTTACCAGTGTCTGTGATCGACA
TTCGCCGATGGAGCTAGCAGACCTAAACAAGCGGCTGCCCTGAATCCTGCCTGCCCTCAGCCAAGCC
CGTGGGAGGCCAGCAGATATGAGAGACAGCAGGCTGTACGGCCATCCAGCCACACACCATCACATTG



[View online »](#)

CAACCATCTTCTCCGAAACCTGCGGCTTCCCAAAGGCTGCGTGTCTACTTCTGGCCCGCACT
GCCTGGCCAGCGCCTCATCATGGCTGGTACCGTTGTCTGGATTGGCATCCTGGTATACACCGACCCGGC
AGGGCTGCGCACCTACCTTGTGCCAGGTGACAGAGCAGAGCCCACTGGGTGAGGGTCCCTGGGCCCC
ATGCCTGTGCCTAGCGGAGTGTGCCTGCCAGCCACCCGACCCTGCATTCTCCATCTTCCCACCTGATG
CTCCTAAACTGCCAGAGAACCAGACCTTGCCAGGTGAGCTGCCTGAGCATGCTGGTCCAGCAGAGGGTGT
CCATGACAGCCGAGCCCCAGAGGTAACCTGGGGCTTGAGGATGAGGAGCTGTGGAGAAATTGTCCTTC
CGCCACTGGCCACACTTTCACTACTACAACATCACACTGGCCAAAAGGTACATCAGCCTGCTGCCTG
TCATCCCTGTCACTACACCTGAATCCACGGGAGGCTCTGGAGGGCGACACCCTCAGGATGGTCGCAG
TGCTGGGCCCCACAAGACCTTTGCCCGCTGGCCTCTGGGAGTCCGGACCTAAGGGACCAGGTGGAACA
CAGACCCATGGCGACATTACCTGTACAAGGTGGCCGCGCTTGGCCTAGCAGCGGCATCGTCTGGTGC
TGCTGTGCTCTGCCTTACCGGTGCTCTGCCCGTAATTAAGGGCAGCCGGTGGTGGCCCCGGCAG
GCGGAGGCGGGGAGCTGCCCTGCGATGACTACGGCTACGCACCGCCGAGACGGAGATAGTCCGCTG
GTGCTGCGAGGTACCTCATGGACATCGAGTGTCTGGCTAGCGATGGGATGCTACTAGTGAGCTGCTGCC
TGGCAGGCCAAGTCTGCGTGTGGGACGCTCAGACAGGGGACTGCCTCACACGGATCCCACGCCAGGGCC
ACGCCGGATAGCTGCGGAGGTGGAGCTTTTGGACTCAGGAGAACTGGGAAAGGCTGTGATGGAGGC
AAGGCTAGCCCGAAGAACCTGGAGACGCCCTCCGCTGCGACGACGCCCCGAGGGCCTCCACCGCCTT
CCCTCTTTGGGGACCAGCCGACCTCACCTGCTTAATCGACACCAACTTCTCGGTGCAGCTGCCCCAGA
GCCCACTCAGCCCGAGCCTCGGCACCGGGTGGGCTGTGGCCGCTTAGAGACTCGGGTTATGACTTCAGC
CGCCTGGTGCAGCGTGTGTACCAGGAGGAAGGCCTGGTGTCTATGCGCATGCCGGCCCTGCGCCACCT
CCCCTGGACCTCCCTTGGCCAGGCCTCAAGAAGAGGGGACTGCACCTGAGAAGGGCTCCCCTCCCCT
GGCCTGGACCCAGCACAGCCGTTCCATCTGGAGCTTAGAGCTGCAAGGCAATCTCATCGTGGTTGGG
CGGAGCAGCGCCGGCTGGAGGTGTGGGACGCCATTGAGGGGTGCTCTGCTGCAGCAATGAGGAGATCT
CCTCAGGCATCACAGCCCTTGTCTTCTGGACAGGAGGATTGTAGCTGCTCGGCTTAATGGTTCCCTTGA
TTTCTTTTCTTTGGAGACCCACACTTCCCTCAGCCCCCTGCAGTTCAGAGGGACCCAGGGCGAGGCAAT
TCTCCTTCTCATCTGTGTACAGCAGCAGCAACACAGTGACCTGTCTCGGACCCACACAGTGCCCTGTG
CACACCAGAAGCCATCACAGCCCTGAGAGCTGCTGCCGGGCGCCTAGTGACAGGGAGCCAAGACCATA
TCTAAGAGTCTCCGACTGGATGACTCGTGTTCCTTTACCCTGAAGGGCCACTCAGGGGCAATCACA
GCTGTGTACATTGATCAGACCATGGTACTGGCCAGTGGAGGACAAGATGGAGCCATCTGCCTGTGGGATG
TACTAACAGGCAGCCGGTCCAGCAAACATTTGCTCACCGTGGAGATGTTACCTCCCTCACCTGTACCGC
TTCCTGTGTCATTAGTAGTGGCCTGGATGACTTATCAGTATCTGGGACCGCAGCACAGGCATCAAGCTG
TACTCCATTCAGCAGGACCTGGGCTGTGGTGAAGCTTGGGTGTCATCTCAGATAACCTTCTGGTGACCG
GCGGCCAGGGCTGTGCTCCTTTTGGGACCTAAACTATGGGACCTGTTACAGACAGTCTACTTGGGCAA
GAACAGTGAAGCCAGCCTGCCGGCAGATTTGGTGTGGACAATGCTGCCATTGTCTGCAACTTTGGC
AGTGAGCTCAGCCTAGTGTATGTGCCCTCTGTGCTGGAGAACTGGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR211884 protein sequence
 Red=Cloning site Green=Tags(s)

MTLTERLREKISQAFYNHGLLCASYPIPIILFTGLCILACCYPLLKPLPGTGPVEFSTPVKGYSPPPAD
 SDHKQGEPEQPEWYVYVAPVAYIQQIFVKSSVSPWHRNLLAVDVFRSPLSRAFQLVEEIRNHVLRDSSGT
 KSLEEVCLQVTDLLPGLRKLRSLLPEHGCLLLSPGNFWQNDWERFHADPDIIGTIHQHEPKTLQTSATLK
 DLLFGVPGKYSGVSLYTRKRMVSYTITLVFQRYHAKFLSSLRARLMLLHPSNCSLRAENLVVHVFKEEI
 GIAELIPLVTYIILFAYIYFSTRKIDMVKSKWGLALAAVVTVLSLLMSVGLCTLFGLTPTLNGGEIFP
 YLVVVIGLENVLVLTksvVSTPVDLEVKLRIAQGLSSESWSIMKNAATELGIIILIGYFTLVPAIQEFCLF
 AVVGLVSDFFLQMLFFTTVLSDIRRMELADLNKRLPPESCLPSAKPVGRPARYERQQAVRPSTPHTITL
 QPSSFRNLRPKRLRVIYFLARTRLAQRLIMAGTVVWIGILVYTDPAGLRXYLAAQVTEQSPLGEGSLGP
 MPVPSGVLPAHPDPAFIFPPDAPKLPENQTLPGELPEHAGPAEGVHDSRAPEVTWGLEDEELWRKLSF
 RHWPTLFNYYNITLAKRYISLLPVPVTLHLNPREALEGRHPQDGRSAWAPQEPLPAGLWESGPKGPGGT
 QTHGDITLYKVAALGLAAGIVLVLLLLCLYRVLCPRNYGQPGGGPGRRRRGELPCDDYGYAPPETEIVPL
 VLRGHLMDIECLASDGMLLVSCCLAGQVCWDAQTGDCLTRIPRPGPRRDSGGGAFETQENWERLSDGG
 KASPEEPGDSPLRRRPRGPPPSLFGDQPDLTCLIDTNFSVQLPPEPTQPEPRHRVGCGRSRDSGYDFS
 RLVQRYVQEGLAAMRMPALRPPSPGPPLPQASQEEGTAPEKGSPLAWTPSTAGSIWSLELQGNLIVVG
 RSSGRLEVWDAIEGVLCCSNEEISSGITALVFLDRRIVAARLNGSLDFFSLEHTSLSPLQFRGTPGRGS
 SPSSSVYSSNVTCHRTHVPCAHPKIPITALRAAAGRLVTGSQDHLRVFRLDDSCCLFTLKGHSGAIT
 AVYIDQTMVLASGGQDGAICLWDVLTGSRVSTFAHRGDVTSLTCTASCVISSGLDDFISIWDRSTGIKL
 YSIQQDLGCGASLGVISDNLVTGGQCVSFDLNYGDLLQTVYLGKNSEAQPARIQLVLDNAAIVCNFG
 SELSLVYVPSVLEKLD

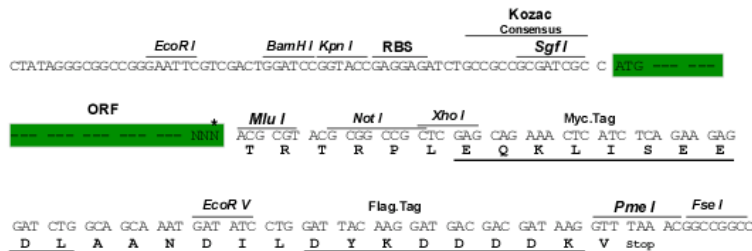
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfi-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



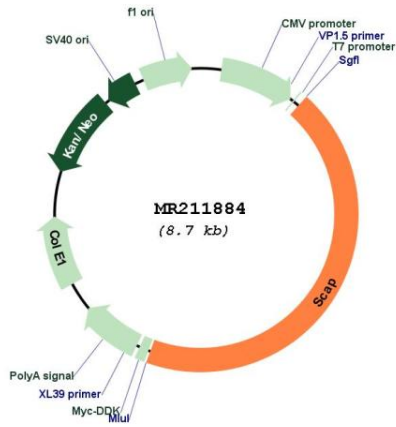
* The last codon before the Stop codon of the ORF

ACCN: NM_001001144

ORF Size: 3831 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:	<ol style="list-style-type: none">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_001001144.1 , NP_001001144.1
RefSeq Size:	4226 bp
RefSeq ORF:	3831 bp
Locus ID:	235623
UniProt ID:	Q6GQT6
Cytogenetics:	9 59.91 cM
MW:	139.6 kDa
Gene Summary:	Escort protein required for cholesterol as well as lipid homeostasis. Regulates export of the SCAP/SREBF complex from the ER upon low cholesterol. Formation of a ternary complex with INSIG at high sterol concentrations leads to masking of an ER-export signal in SCAP and retention of the complex in the ER. Low sterol concentrations trigger release of INSIG, a conformational change in the SSC domain of SCAP, unmasking of the ER export signal, recruitment into COPII-coated vesicles, transport to the Golgi complex, proteolytic cleavage of SREBF in the Golgi, release of the transcription factor fragment of SREBF from the membrane, its import into the nucleus and up-regulation of LDLR, INSIG1 and the mevalonate pathway. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211884