

## Product datasheet for MR224487

### Sycp1 (NM\_011516) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sycp1 (NM_011516) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sycp1
Synonyms:	SCP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR224487 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGAAGCAAAGCCCTTCACACTGTTCTGCCGCGAGGCTGAGCAGCAGTCAAGTGTCCGCCGTGA  
AACCGCAGACGGCGGGAGGAGACTCCAACACTTCAAGACTGTCAACAAATGTACAGAAGGTGATTTTGG  
TGTTCCATTTACAATGTCCAGTCGGGAAAACATTGATAAAGATCTGCTTTTCAAAAACCTAGTATTTTGG  
CCCATGCTCGAACAGGTTGCTAATCTGGCAGTTGTCACATCAGGAAGGAGTAAATGACTCTGATTTTGG  
AGAATTCAGAGCCAATGAGCAGACTGTATTCAAAGCTGTATAAAGAGGCTGAAAAGATAAAAAGTGAA  
AGTGAGCATAGAATCTGAACTGAAGCAGAAAGAAAATAAGTTGCAAGAAAACAGAAAAGATAATTGAAGCC  
CAGCGAAAAGCCATTCAGGAACCTCAGTTTGAAAATGAAAAGTAAAGCTTGAAATTAAGAAGAAGAAATTC  
AAGAAAATAAAGATTTAATAAAGGAGAATAATGCTACAATACATTGGTGAATCTACTCAAGGAAACCTG  
TGCTAGATCTGCAGAAAAGACAAAATAAATATGAATATGAGCGGGAAGAAACCAGACAAGTTTATGTGGAT  
CTAAATAGCAACATTGAGAAAATGATACTAGCTTTTGAGGAACCTCGTGTGCAAGCTGAGAATGCCAGAC  
TGGAAATGCATTTTAAGTTAAAGGAAGATCATGAAAAATCCAACATCTTGAAGAAGAATATCAGAAGGA  
AGTAAACAACAAGGAAAATCAGGTATCAGAAGCTGTTGATCCAAAGTGTGAGAAAAGAAAATAAAATGAAA  
GATTTAACATTTCTGTTAGAGGAATCCAGAGATAAAGCTAATCAATTAGAGGAAAAACAAAATTAACAAG  
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CAGCTCACTGAAGTAAAAGAAGCTCAAATGGAAGAACTCAACAAAGCTAAAACACTCACTCATTGTGG  
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TTTGGAAACCAGAGAGAAAGAAGTCCATGATTTGCAAGAACAAGTAACTGCTCACTAAAACAAGTGAACAG



CATTATTTAAACAGGTTGAAGAAATGAAAACCTGAGCTTGAAAAAGAGAACTTAAGAATACTGAATTAA  
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 ACTCAAGAAACATCAAGAAGATATCATTAAATTGCAAAAAGCAAGAAGAAAGGCTGTTGAAACAAATAGAA  
 AATTTGGAAGAAAAAGAAATGCATTTAAGGGATGAACTGGAATCAGTAAGAAAAGAGTTCATACAGCAAG  
 GAGATGAAGTTAAGTGTAAATTTGGACAAGAGTGAAGAAAATGCTCGAAGCATTGAATGTGAAGTTTTAA  
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 AAGAATATTGAAGAGCTTCACCAGGAGAATAAACCTTGAAAAAAAAGAGTTCAGCAGAAAATCAAACAAC  
 TGAATGCATATGAGATAAAGGTCAGTAAATTAGAGTTGGAATTAGAAAAGTACCAAGCAAAGATTTGAAGA  
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 TTTTACCTACAACAGTTACAAAGGAATATACAGTGAAGACACCAACTAAAAGAGTATATATCAAAGAGA  
 AAACAAGTATATACCTACTGGAGGAAGTAAATAAAGAGAAAAACAGCCTTTGAATTTGATGTTAATTC  
 GATAGTTCAGAAACTGCTGATCTCTTGAGCCTGGTTTCAGAGGAAGATGTATCAAACAGACTTTATGATA  
 ATAATCCACCAGATTCTCATCTATTAGTTAAAACCCCAACAGACTCCTTTATCGCTATCAACTCCTGC  
 ATCTTTTATGAAGTTTGGAGTCTGAAAAAATGAGAGAGGACCGTTGGACAACGATTGCTAAAATTGAT  
 AGGAAAAGAAGACTAAAGGAAGCAGAAAAGTTATTTCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATTAAGGTTTAA

**Protein Sequence:**

>MR224487 protein sequence  
 Red=Cloning site Green=Tags(s)

MEKQKPFRLFVPPRLSSSQVSAVKPQTAGGDSNYFKTVNKCTEGDFGVFPFTMSSRENIDKDPAFQKLSIL  
 PMLEQVANSCHYQEGVNDSDFENSEPMSRLYSKLYKEAEKIKKWKVSI ESELKQKENKLQENRKII EA  
 QRKAIQELQFENEKVSLLKEEIQENKDLIKENNATIHWCNLLKETCARSAEKTNKYEYEREETRQVYVD  
 LNSNIEKMILAFEELRVQAENARLEMHFKLKEDHEKIQHLEEEYQKEVNNKENQVSELLIQSAEKENKMK  
 DLTFLL EESRDKANQLEEKTKLQDENLKEKSEKDHLS ELEDIKMSMQRSMS TQKALEEDLQIATKTIS  
 QLTEVKEAQMEELNKAKTTHSFVVELKATTCTLEELLRTEQQRLEKNEQLKLI TVELQKKSNELEEMT  
 KFKNNKEVELEELKNILAEDQKLLDEKKQVEKLA EELQEKEQELTFLL E TREKEVHDLQE QVTVTKTSEQ  
 HYLKQVEEMKTELEKEKLNTEL TASC DMLLENK KFVQEASDMALELKKHQEDI INCKKQEERLLKQIE  
 NLEEKEMHLRDELESVRKEFIQQGDEVKCKLDKSEENARSIECEVLKKEKQMKI LESKCNLKKQVENKS  
 KNIEELHQENKTLKKKSSAEIKQLNAYEIKVSKLELELESTKQRF EEMTNNYQKEIENKKI SEGKLLGEV  
 EKAKATVDEAVKLQKEIDLRCQHKAEMVALMEKHKHQYDKIVEERDSELGLYKNREQE QSSAKIALETE  
 LSNIRNELVSLKKQLEIEKEEKEKLMAKENTAILKDKDKKI QASLLESPEATSWKFD SKTTSPQNISR  
 LSSMSD GSKSKDNRDNL RASAKSILPTTVTKEYTVKPTPKKSIYQRENKIPTGGSNKKRRTAF EFDVNS  
 DSSETADLLSLVSEEDVSNRLYDNNPPD SHLLVKTPKQTPLSLSTPASFMKFGSLKKMREDRWTTIAKID  
 RKRRLKEAEKLF S

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_011516

ORF Size: 2982 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.

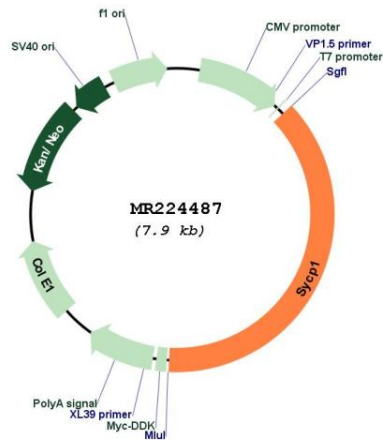
RefSeq: [NM\\_011516.1](#), [NM\\_011516.2](#), [NP\\_035646.2](#)

RefSeq Size: 3437 bp

RefSeq ORF: 2982 bp  
 Locus ID: 20957  
 UniProt ID: [Q62209](#)  
 Cytogenetics: 3 F2.2  
 MW: 116 kDa

**Gene Summary:** Major component of the transverse filaments of synaptonemal complexes, formed between homologous chromosomes during meiotic prophase (PubMed:16717126). Required for normal assembly of the central element of the synaptonemal complexes (PubMed:15937223). Required for normal centromere pairing during meiosis (PubMed:22761579). Required for normal meiotic chromosome synapsis during oocyte and spermatocyte development and for normal male and female fertility (PubMed:15937223).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR224487