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Product datasheet for MG216435

Sycp2 (NM_177191) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sycp2 (NM_177191) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Sycp2
Synonyms:	3830402K23Rik; 4930518F03Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG216435 representing NM_177191
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
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CTCATGAAGGAAATGATGCA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG216435 representing NM_177191
Red=Cloning site Green=Tags(s)

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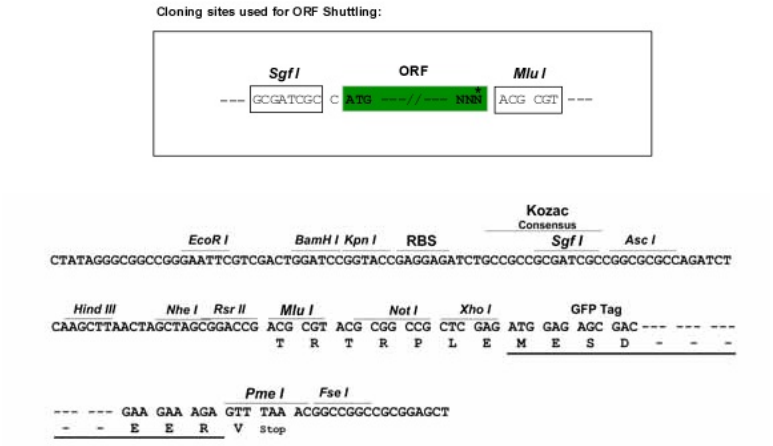
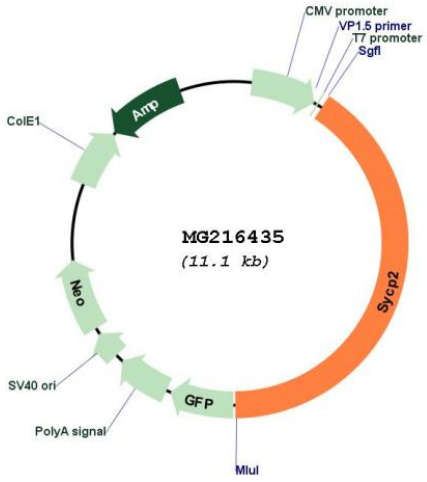
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_177191
ORF Size:	4500 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_177191.3, NP_796165.2
RefSeq Size:	5688 bp
RefSeq ORF:	4503 bp
Locus ID:	320558
UniProt ID:	Q9CUU3
Cytogenetics:	2 H4
Gene Summary:	Major component of the axial/lateral elements of synaptonemal complexes (SCS) during meiotic prophase. Plays a role in the assembly of synaptonemal complexes (PubMed:16717126). Required for normal meiotic chromosome synapsis during oocyte and spermatocyte development and for normal male and female fertility (PubMed:16717126). Required for insertion of SYCP3 into synaptonemal complexes (PubMed:16717126). May be involved in the organization of chromatin by temporarily binding to DNA scaffold attachment regions. Requires SYCP3, but not SYCP1, in order to be incorporated into the axial/lateral elements.[UniProtKB/Swiss-Prot Function]