

## Product datasheet for **MG204512**

### **Sgta (NM\_024499) Mouse Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Sgta (NM\_024499) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Sgta  
**Synonyms:** 5330427H01Rik; A1194281; D10Ertd190e; Sgt; Stg  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG204512 representing NM\_024499  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACAACAGGAAGCGCCTGGCCTATGCCATCATCCAGTTCCTCCATGGCCAGTTGCGGCACGGTGGGC  
TCTCGTGTGACGCCAGGAGAGCCTAGAGGTTGCCATCCAGTGTCTGGAGACAGCCTTCGGGGTGACGCT  
GGAGGACAGTGACCTTGCTCTCCCCAGACCCTGCCAGAGATATTTGAAGCAGCCACTTCCAGCAAGCAG  
GAGATGCCACAGGACCCGCGGGCCCTGACAGGACACCACCTCTGAAGAGGACTCAGCTGAGGCAGAGC  
GCCTCAAACGGAAGGTAATGAGCAGATGAAGCTGGAGAATTCGAGGCGGCTGTGCACCTCTACGGCAA  
GGCCATTGAGCTCAACCTGCAATGCTGTCTACTTCTGTAACAGAGCTGCGGCCACAGCAAGCTGGGG  
AACTACGTGGGGCCGTGACGAGCTGCGAGCGGCCATTGGCATCGACCTGGGTATAGCAAGGCCATG  
GCCGATGGGCCTTGCACTATCCAGCCTGAACAAGCATGCAGAGGCTGTGGCATACTACAAGAAGGCCCT  
GGAGCTGGACCCTGACAACGACACATAAAGTCCAACCTCAAGATTGCAGAGCTGAAGTTACGGGAGGCG  
CCAAGCCCTACGGGCGCGTGGGCAGCTTAGACATCGTGGCCTGCTGAACAACCCACACTTCATACCA  
TGGCTTCGAGCTTAATGAACAGCCCCAGCTACAGCAGCTCATGTGGGCATGATCTCCGGAGGCCATAA  
CCCTCTGGGCACGCCAGGCAGCAGTCCGCAGCAGAGTACCTGGCCAGCCTCATCCAGGCCGGCCAAACAG  
TTTGCACAGCAGATGCAGCAGCAGAACCAGAGTTTGTGGAGCAGATCCGGAGCCAGGTGGTGCCAGCC  
GGACACCCAGTGCCAGCCATGAGGAGCAGCAAGAG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



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**Protein Sequence:** >MG204512 representing NM\_024499  
 Red=Cloning site Green=Tags(s)

MDNRKRLAYAI IQFLHGQLRHGGLSCDAQESLEVAIQCLETAFGVTLESDLALPQTLPEIFEAATSSKQ  
 EMPQDPRAPDRTPPSEEDSAEAERLKTGNEQMKLENFEAAVHLYGKAIELNPANAVYFCNRAAAYS KLG  
 NYVGVAVQDCERAIGIDPGYSKAYGRMGLALSSLNKHAEAVAYYKALELDPDNDTYKSNLKIAELKLEA  
 PSPTGGVGS LDIAGLLNNPHFITMASSLMNSPQLQQLMSGMISGGHNPLGTPGSSPQQSDLASLIQAGQQ  
 FAQQMQQNPEFVEQIRSQVVRSRTPSASHEEQQE

TRTRPLE - GFP Tag - V

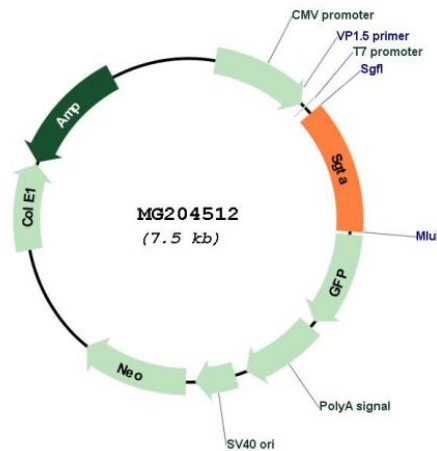
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**



**ACCN:** NM\_024499

**ORF Size:** 945 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_024499.2</a>
<b>RefSeq Size:</b>	1966 bp
<b>RefSeq ORF:</b>	948 bp
<b>Locus ID:</b>	52551
<b>UniProt ID:</b>	<a href="#">Q8BJU0</a>
<b>Cytogenetics:</b>	10 39.72 cM
<b>Gene Summary:</b>	Co-chaperone that binds misfolded and hydrophobic patches-containing client proteins in the cytosol. Mediates their targeting to the endoplasmic reticulum but also regulates their sorting to the proteasome when targeting fails. Functions in tail-anchored/type II transmembrane proteins membrane insertion constituting with ASNA1 and the BAG6 complex a targeting module. Functions upstream of the BAG6 complex and ASNA1, binding more rapidly the transmembrane domain of newly synthesized proteins. It is also involved in the regulation of the endoplasmic reticulum-associated misfolded protein catabolic process via its interaction with BAG6: collaborates with the BAG6 complex to maintain hydrophobic substrates in non-ubiquitinated states. Competes with RNF126 for interaction with BAG6, preventing the ubiquitination of client proteins associated with the BAG6 complex. Binds directly to HSC70 and HSP70 and regulates their ATPase activity.[UniProtKB/Swiss-Prot Function]