

## Product datasheet for **MG218256**

### Chsy3 (NM\_001081328) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Chsy3 (NM_001081328) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Chsy3
Synonyms:	4833446K15Rik; AI662215
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG218256 representing NM\_001081328  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCGTGCGCTCCCGCCGCCATGGGTGAGCGTGGCATTGGGGTTGGTCTGGGCTTACCGCCGCGT  
 CCTGGCTCATCGCCCCCGGGTGGCCGAGCTGAGCGAGAAGAGGGGACGCGGCTCCAGTCTTTGCTCCTA  
 CTACGGCCGCTCGGCTACCGGGCCCGCGGAGCGCAGCAGCTGCTCCCCAACCCAGTCCCGGCCG  
 CGGCTAGAGCAGTCGCCGCCCTGCCAGCCAGAGCTCCCGGTCTCAGCAGCCGGAGGCGGCCCG  
 GAGGTCCAGTTTTCGGAGCAGCCCTGCCAGCAGCCGGCTCTGTTGCCGAGAGGAGGCGAGGACACAC  
 GCCCAAGGTGCGACGGCGCTTCCCGGCTCCGGCTGCCAAAGGGGAACCAGAGGAGGAGGATGGGGC  
 GCGGCTGACCCTCGAAGGTGGCCGGCCGGGAGCAGCCACAACGGCAGCGGGGACGGGGTGGCGTG  
 TCCCGACTCCGGACCCGGGACTTCTGTACGTGGGTGTGATGACCGCACAGAAGTACCTGGGCAGTCCG  
 CGCGCTGGCCGCGCAGCGGACTGGGCGCGCTTATCCCTGGCCGCGTGGAGTTCTTTCCAGTCAGCAA  
 TCTCCAGTGCTGCGCTTGGCCAGCCCCGCCACCTTTGCTGTATCGCGCTGCCAGGGTTCGACGATT  
 CCTACCCTCCCCAGAAAAGTCTTTCATGATGATCAAGTACATGCACGACCCTATCTGGACAAGTATGA  
 GTGGTTTATGCGCGCCGACGACGATGTCTACATCAAAGGTGATAAGTTAGAAGATTTCTAAGATCCCTA  
 AATAGCAGCAAGCCTCTTACCTGGGACAGACGGCCCTGGGCAATACTGAAGAACTTGGAAAAGTGGGGC  
 TGGAGCCCGGGGAGAAGTCTGCATGGGAGGACCTGGCATGATCTTCAGCAGAGAGGTTCTCAGGCGGAT  
 GGTGCCTCATATCGGCGAATGCCTCCGAGAGATGTACACCACACGAAGACGTAGAAGTAGGAAGGTGT  
 GTTCGCGTTCGCGGGACGAGTGTGTCTGGTCTTATGAGATGCAGCAGCTGTTCCATGAAAACACG  
 AACACAATCGCAAGGTTACATCCAAGACTCCACAACAGCAAAATCCACGCAGCCATCACGCTCCATCC  
 GAACAAAAGGCCCGCTACCAAGTACAGACTTCATAACTACATGCTCAGCCGCAAGATCTCCGAGCTCCGC  
 TACCGCACCATCCAGCTCCACCGGAGAGCGCTCTCATGAGCAAGCTCAGCAACAGTGAAGTGAAGAAAG  
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 AGCATCTAAGGTCAGCTCTGGATGACTGTCTGCAGGTGATGGAGATGATCAACGAGAATGCCAAGA  
 GTAGGGCCGACTCATCGACTTCAAGGAAATTCAGTATGGCTACCGCAGGTTGATCCCATGCACGGGT  
 TGAGTACATATTGACCTGCTACTCTGTACAAAAGGCACAAAGGAAGGAACTGACTGTGCTGTGAGG  
 CGCATGCCTATCTTACGAGCCATTTAGCAAGCCTTTCTCAGAGAGGTGGAAGAACTCGACGTCAACC  
 GTCTGGTGGAGAGTATCAACAGCGGTACACAGTATTCTCGTTATATCCAATTCTAAAAATCTCTC  
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 GGAAGGTACGACATTTTCTTGGATTATGAAAATTTTGAAGTACGTGTCTTATCCCAAAGCAAAATG  
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 CTTGGTCTTGAATGGCTTCTCCAGTTTGAATGACACATTGCTGCTATTTTGTGATGTTGACTTGA  
 TTTTCAGAGGAGACTTCTCAACGCTGTCGAGACAATACAGTTCAGGGACAACAGGTATATTACCCCAT  
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 TCAAAGGAAACTGGGTTTTGGAGAGACTATGGCTACGGAATCACATGCATTTACAAAAGCGATCTACTGG  
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 GATCCTAACTGGACCCTAAGCAGTATAAGATGTGCTTAGGATCCAAAGCAAGTACTTTTGCCTCAACCA  
 TGCAACTGGTGAAGTCTGGTTAGAAAACATTTGGGTGTCAGGGATAATCGAAGTCTCTCC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG218256 representing NM\_001081328  
Red=Cloning site Green=Tags(s)

MAVRSRRPWVSVALGLVLGFTAASWLIAPRVAELSEKRRRGSSLCSYYGRSATGPRADAQQLLPQPQSRP  
 RLEQSPPPASHELPGPQQPEAAPGGPSFRSSPWQPALLPQRRRHTPEGATALPGAPAAKGEPEEEDGG  
 AADPRKGGRPSSHNHSGDGGAAVPTSGPGDFLYVGVMTAQKYLGSRALAAQRTWARFIPGRVEFFSSQQ  
 SPSAALGQPPPLPVIALPGVDDSYPPQKKSFMMIKYMHDHYLDKYEFWMRADDVYIKGDKLEEFRLSL  
 NSSKPLYLGQTGLGNTEELGKLGLEPGENFCMGGPGMIFSRVLRMRVPHIGECLREMYTTHEDEVGRC  
 VRRFGGTQCQVWSYEMQQLFHENYEHNRKGYIQDLHNSKIHAAITLHPNKRPAQYRHLHNYMLSRKISELR  
 YRTIQLHRESALMSKLSNSEVSKEDQQLGRTPSFNHFQPRERNEVMEWFLTGKLLYSAENQPPRQSIN  
 SILRSALDDTVLQVMEMINENAKSRGRLIDFKEIQYGYRRVDPMHGVEYILDLLLLYKRHKGRKLTVPVR  
 RHAYLQQPFKPFREVEELDVRNLVESINSGTQSFVINSLSKILSSLQEAKDIGGNEKKVHILVPLV  
 GRYDIFLRFMENFESTCLIPKQNVKLVILFSRDAGQESIKHIELIQEYQSRYPSEMMIPMKGEFSRG  
 LGLEMASSQFNDNTLLFCVDVLI FRGDFLQRCRDNTVQGQVYYPPIIFSQYDPKVTHMRNPTEGDFV  
 SKETGFWRDYGYGITCIYKSDLLGAGGFDTSIQGWGLEVDLYNKVILSGLRPFRSQEVGVVHIFHPVHC  
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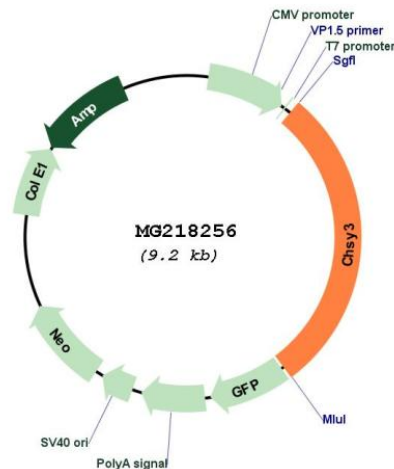
TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** NM\_001081328

**ORF Size:** 2652 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\\_001081328.1](#), [NP\\_001074797.1](#)

**RefSeq Size:** 3882 bp

**RefSeq ORF:** 2655 bp

**Locus ID:** 78923

**UniProt ID:** [Q5DTK1](#)

**Cytogenetics:** 18 D3

**Gene Summary:** Has both beta-1,3-glucuronic acid and beta-1,4-N-acetylgalactosamine transferase activity. Transfers glucuronic acid (GlcUA) from UDP-GlcUA and N-acetylgalactosamine (GalNAc) from UDP-GalNAc to the non-reducing end of the elongating chondroitin polymer. Specific activity is much reduced compared to CHSY1.[UniProtKB/Swiss-Prot Function]