

## Product datasheet for **MG221686**

### Casd1 (NM\_145398) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Casd1 (NM_145398) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Casd1
Synonyms:	Cas1; Cast1; SOAT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MG221686 representing NM\_145398  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGGCTCTGGCCTACAACCTGGCAAGCGGGAGATCAACCACTACTTCAGCGTGAGGAGCGCCAAGG  
 TGCTGGCGCTGGTGGCCGTGCTGCTGCTCGCAGGGTGCCACCTCGCGTCCGCGCTACCGAGGCAATGA  
 TTCGTGTGAATACCTTCTCTCGAGCGGCAGATTTCTTGGAGAAAAAGTTGGCAACCTCAGAGTTGTATG  
 ATGCATAAATACAAAATAAGTGAAGCAAAGACTTGCCTGTAGATAAACACATTGCGTTTATTGGAGATT  
 CCAGGATCCGTCAATTATTTTATCTTTTGTAAAAATCATTAAACCCAGTTTAAAGAAGAAGGAAATAA  
 GCATGAAAACATTCCTTTTGAAGACAAGGCTGCATCAGTTAAAGTGGATTTTCTTTGGCATCCAGAAGTT  
 AATGGTCCATGAAACAATGTATCAAGGTGTGGACTGAGGACTCGGTTTTGAAGCCCATGTGATTGTAG  
 CAGGAGCAGCCACATGGTCCATCAAGATTCATAATGGCAGCGAGGAGGCACTAGCTCAGTAAAAATGAA  
 TATCACCTCCATAGCACCCTTTAGAAAAATTGGCCAAGACTAGTGATGTTTATTGGGTCTTACAAGAC  
 CCAGTTTATGAGGATCTCTTAAGTGAAAAATAGGAAAAATGATTACCAATGAGAAGATAGACGCTACAATG  
 AGGCTGCAGTCAGCATCCTGAACAGCAGCACCAGGACCTTAAGTCCAATGTGAAGATGTTCAAGTGTTC  
 CAAACTCATTGCCAAGAGACCATCATGGAGTCTCTGGATGGCTTACACCTTCTGAATCGAGCAGAGAA  
 ACTAGTGAATGATTCTCATGAACGTGTACTGCAATAAAGTTGTGAAGCCTGTGGATGGTTCCTGTTGTC  
 AGCCTCGGCCACCTCTCACTCTCATTGAGAAGCTAGCTGCTTGTCTTTTCACTTTATCCATTATTGGGTA  
 TTTTATTTCTATGTAATTCATCGTAATGCTCACCGGAAGAATAAACCATGTACTGATTTGGAGAGTGGC  
 GAGGAAAAAGAAGAAATATTATCAATACTCTGTGCTTTCATTAGAAATACTTTTACAGTCTTTTGAACA  
 TTGGCCTGATTATGGCTTATTTCTATATGTGTGACCGTGCAAACCTGTTTATGAAGGAAAAACAAATTTTA  
 TACACATTCATCATTCTTTATTCCAATTATCTACATCTTGGTTTTGGGAGTATTTTACAATGAAAAACACA  
 AAAGAGACTAAAGTGTAAATAGAGAGCAAACCTGATGAATGGAAGGCTGGATGCAGCTTGTGATTTTGA  
 TCTATCACATCTCGGAGCAAGCACATTTCTGCCTGTGTACATGCACATTCGAGTTCTGGTGGTGCATA  
 TCTGTTTCAGACAGGACGCGCATTTCTTACTTTTGGATCAAAGGAGATTTTGGGATTCATAGAGTG  
 TGTGAGTCTTATTTGCTCTCAATTTCTGTTGTGGTGTATGTATCGTAATGGATCGACCATATCAGT  
 TCTATTACTTTGCCCCTTGGTTACCGTGTGGTTCATGGTCATATATGCACTTTAGCACTGTGGCCACA  
 AATAACCCAAAAGAAGGCAAATGGAATTTTTTCTGGTATCTCGGCTTACTGTTGAAACTAGGCTTGCTG  
 CTGCTGTGCATATGGTCTTGGCATATTCTCAGGGTGCATTTGAGAAGATCTTTTCTCTATGGCCACTTT  
 CCAATGTTTTGAACTAGAAGGGAGCGTGTATGAATGGTGGTTCAGGTGGAGGCTAGACCCTACGTTGT  
 CTTCCATGGGGTTCTGTTTGTCTTTCATTTATCTGGCTTTCGAGAGACGGCAAATACTTTCTGAAGGAAAG  
 GGTGAACCACTCTTTCAAACAAAATTTCCAACCTTCTATTGTTTGTTCAGTAGTGTCTTTCTTGACCT  
 ATTCATCTGGGCTAGCAGCTGTAAAGAACAAGCAGAGTGAACGAACCTCCACCATCTGTGCTGTGGT  
 ACAGATTGTAGCCTTTCATCTGATAAGGAACATACCTGGATATGCCCGTTCTATATACAGTTCTTTTTT  
 GCTTGGTTTGGAAAAATTTCACTAGAGCTGTTCATCTGCCAGTACCACATCTGGCTGGCAGCAGACACAA  
 GGGGCATCCTGGTCTCATCCCTGGAAACCCGACACTCAACATCATCGTCAGCACGTTTCTTTCGTTTG  
 TGTGGCAGATGAGATTTCTCAGATCACCACTGACCTCGCGCAGGTCGTTATTCTAAAGATAACCCGCTC  
 CTCTCCGAAGGCTGGCATGTACGATTGCATTTCTGGTGGAGTCCCTCATCTTATCTCCATTCAAGATA  
 AATCAAGACTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG221686 representing NM\_145398  
 Red=Cloning site Green=Tags(s)

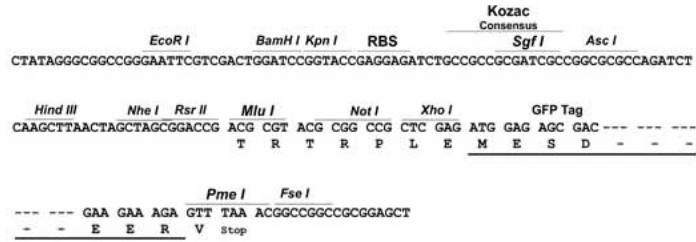
MAALAYNLGKREINHYFSVRSKVLALVAVLLLAACHLASRRYRGNDSCHEYLLSSGRFLGEKVVWQPHSCM  
 MHKYKISEAKTCLVDKHIAFIGDSRIRQLFYFVKIINPQFKEEGNKHENIPFEDKAASVKVDLWHPEV  
 NGSMKQCIKVTEDSVLKPHVIVAGAATWSIKIHNGSEEALAQYKMNITSIAPLLEKLAKTSDVYVWLQD  
 PVYEDLLSENRMITNEKIDAYNEAAVSILNSSTRTSKSNVKMFSVSKLIAQETIMESLDGLHLPESRE  
 TSAMILMNVYCNKVVKPVGDGSCQPRPPLTLIQKLAACFFTLIIIGYFIFYVIHRNAHRKNKPCDLESG  
 EEKNIINTPVSSLEILLQSFCKLGLIMAYFYMCDRANLFMKENKFYTHSSFFIPIIYILVLGVFYNT  
 KETKVLNREQTDEWKGWMLVILYHISGASTFLPVYMHIRVLAAYLFQTGYGHFSYFWIKGDFGIHRV  
 CQVLFRLNFLVVVLCIVMDRYPYQFYFVPLVTVMVIYVTLALWPQITQKKANGNFFWYLGLLKLGLL  
 LLCIWFLAYSQGAFEKIFSLWPLSKCFELEGSVYEWFRWRLDRYVVFHGVLFAFIYLALQRRQILSEGK  
 GEPLFSNKISNLLFVSVVSFLTYSIWASSCKNKAECNELHPSVSVVQIVAFILIRNIPGYARSIYSSFF  
 AWFGKISLELFICQYHIWLAADTRGILVLIIPGNPTLNIIVSTFIFVCAHEISQITTDLAQVVIPKDNPS  
 LFRRLACTIAFFGGVLILSSIQDKSRL

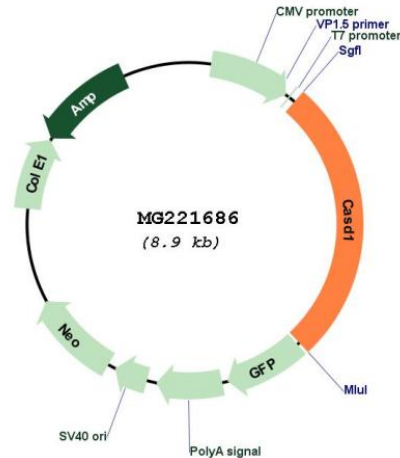
TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



**Plasmid Map:**


**ACCN:** NM\_145398

**ORF Size:** 2391 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_145398.2](#), [NP\\_663373.2](#)

RefSeq Size: 3760 bp

RefSeq ORF: 2394 bp

Locus ID: 213819

UniProt ID: [Q7TN73](#)

Cytogenetics: 6 1.81 cM

**Gene Summary:** O-acetyltransferase that catalyzes 9-O-acetylation of sialic acids. Sialic acids are sugars at the reducing end of glycoproteins and glycolipids, and are involved in various processes such as cell-cell interactions, host-pathogen recognition.[UniProtKB/Swiss-Prot Function]