

Product datasheet for **MG215608**

Cast (NM_009817) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cast (NM_009817) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cast
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG215608 representing NM_009817
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCATTTCGCAAGTTGGTGGTACAAGACGCATGTTAATGAAAAGAATATTGGATCATCTTCTAAACCAG
 GAGAAAAGAAAGGATCCGATGAGAAAAAGCAGCAAGTTTGGGGAGCAGTCAGCCTTCCAGACCACATGT
 TGGTGAAGCTGCCACAGCCACCAAGGTGACAGTTCCTCTGCTGCCACCAGCAAGTCCCCAGCATGAGT
 ACCACAGAGACTAAGGCTGTGAAAAAGAGTCTAAGAAACCACAATCAAGTGAGCAACCTGTGGTTCACG
 AGAAAAAGTCAAAGGAGGGCCAAAGGAAGGTGACAGCCAAAAATCTCCGAAGCACACATCAAGTAC
 AGGAAGCAAGCATGCTCATAAAGAAAAAGCACTTCCAGATCAAATGAACAGATGGTGTGAGAGAAACCA
 TCAGAATCAAAGACAAAATTTCAAGATGTTCTTCAGCTGGTGGAGAGAGTGGCTGGAGGTGGGACTG
 TGGCCACTGCCTTGGACAAAGTGGTTGGTAAGAAAAAAGAACAGAAACCATTACACCAGCTTACCTGT
 GCAGTCCACCCGAGCAAGCCATCTGACAAGTCAGGCATGGATGCTGCCTTGGATGACCTGATAGACACC
 TTAGGTGGACATGAAGATACTAACAGAGATGATCCACCATATACTGGACCAGTAGTTTTGGACCCAATGT
 ATTCTACCTACCTTGAGGCACTGGGTATAAAAAGAGGGACTATTCCTCCAGAGTATAGGAAACTTTTGGAA
 AAAAAATGAAGGGATCACACAACCTCTCCAGACTCTCCTAAACCTATGGGGACTGACCAGGCTATAGAT
 GCCTTGTCTATCTGATTTACCTGTAGTTCTCCAAGTGGAAAGCAAAGTGAGAAAGAGAAGTCTACTGGGG
 AAATTTTCAAAGTCTAGTCTGCAGGAGTGACCAGAAGTCTGTTCCTCCCAAGGAGAAGAAAGGAAAGGT
 GGAAGAGGAGGTCATAAATGATCAAGCACTTCAAGCTCTGTCAGATTCACTGGGCACCCGGCAGCCAGAT
 CCTCCGAGCCACGTTAGCCAAGTGAACAAGTCAAAGAGGCAAAGCAAAGAAAGAAAGGAGGAGAAAGT
 GTGGTGAAGATGAGGACACAGTCCAGCTGAGTACAGGTTAAAACCAGCAAAGGATAAAGATGGAAAACC
 ACTATTGCCAGAGCCTGAAGAAACATCTAAGAGCCTGAGTGAGTGGAGCTGATTGGGGAGCTTTTACAGCA
 GATTTTGACCGATCTACATATCAAGACAAACCTCTACGCCAGCTGAAAAGAAATCCAATGACACATCCC
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 ATCCTTGAAGGGCGTGGTACCAGAAGATGCTGTTGAAACCTTGGCTGGAAGCCTGGGGACAAGGGAAGCA
 GATCCAGAACATGAAAAAAGTGTGGAGGATAAAGTCAAGGAGAAAGCTAAAGAAGAAGAGCATGAAAAAC
 TTGGTGAAGAAGAAACAGTGCCTCCTGATTATCGACTAGAAGAAGTCAAGGATAAGGATGGAAAACC
 ACTCCTGCCAAAGAATCCAGGAACAAGTGCACCTTAAGCGATGACTTCTTCTTGATGCCTTGTCT
 CAGGACTTCTCCAGTCCGGCAAACATATCGTCTTGAATTTGAAGATGCCAACTTTCTGCTGCCATTT
 CTGAAGTAGTTTCTCAGACACCTGCTCCAAGCACCATGCAGCAGCTCCACTGCCTGGCACTGAGCAGAA
 AGACAAAGAAGTGTGATGATGCCTTGGATGAACTTTCTGACAGTCTTGGACAAAGGCCGCTGATCCAGAT
 GAGAACAAACCACTGGATGACAAAGTGAAGGAGAAAAATCAAACCAGAGCATAGCGAGAACTGGGAGAAA
 GAGACGACACCATCCCCCTGAATACAGGCATCTCTTGGATAATGATGGGAAGGACAAACCAGAGAAGCC
 ACCGACTAAGAAAACAGAGAAACCTGATCAGGACCGGGACCCATTGATGCCCTCTCAGAAGATTTGGAT
 AGCTGCCCTCAACTACAGAGACCTCAAAGAATACAGCAAAGGGGAAGAGCAAGAAGACTTCAAGTTCCA
 AAGCATCCAAGGACGGAGAGAAAAAAGGACTCTTCCAAGAAGACAGAGGAAGTGTCCAAGCCAAAGGC
 TAAAGAAGATGCAAGACACAGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG215608 representing NM_009817
 Red=Cloning site Green=Tags(s)

MAFASWWYKTHVNEKNIGSSSKPGEKKGSDKKAASLGSSQPSRPHVGEAATATKVTASSAATSKSPSMS
 TTETKAVKTESKKPQSSEQPVVHEKSKGGPKGSEPKNLPKHTSSTGSKHAKHEKALSRNEQMVSEKP
 SESKTKFQDVPSAGGESVAGGGTVATALDKVVGKKKEQKPFPTASPVQSTPSKPSDKSGMDAALDDLIDT
 LGGHEDTNRDDPPYTGPVVLDPMYSTYLEALGIKEGIPPEYRKLLEKNEGITQPLPDSPKPMGTDQAID
 ALSDFTCSSPTGKQSEKEKSTGEIFKAQSAGVTRSSVPPKEKRRKVEEVEVINDQALQALSDSLGTRQPD
 PPSHVSQAEQVKEAKAKEERQEKCGEDEDTVPAEYRLKPAKDKDGKPLLPPEETSKSLSESELIGELSA
 DFDIRSTYQDKPSTPAEKKSNDTSQTTPGETVPRASMCSIRSAPPKLASLKGVPEDAVETLAGSLGTREA
 DPEHEKTVEDKVKEKAKKEEHEKLEKEETVPPDYRLEEVDKDKGKPLLPKESQEQALPLSDDFLLDALS
 QDFSSPANISSLEFEDAKLSAAISEVVSQTPAPSTHAAAAPLPGTEQKDKELDDALDELSDSLGQRPPDPD
 ENKPLDDKVKEIKPEHSEKLGERRDTIPPEYRHLLDNDGDKPEKPPTKKTEKPDQDRDPIDALSEDLD
 SCPSTTETSKNTAKGSKKTSSSKASKDGEKTKDSSKKTEEVSKPKAKEDARHS

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1643_e09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_009817

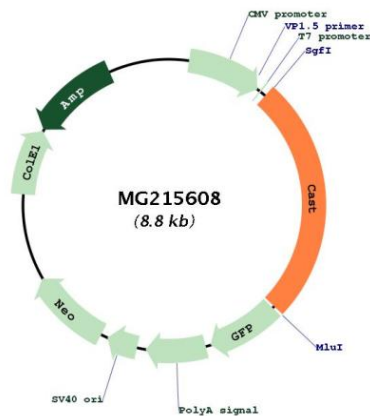
ORF Size: 2262 bp

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_009817.4](#)
- RefSeq Size:** 2894 bp
- RefSeq ORF:** 2265 bp
- Locus ID:** 12380
- Cytogenetics:** 13 C1
- Gene Summary:** This gene encodes an inhibitor of the calcium-dependent cysteine protease, calpain. This protein plays roles in multiple processes, including apoptosis, cell cycle regulation, and membrane fusion. Multiple protein isoforms exist which contain unique N-terminal domains, and multiple inhibitory domains that share homology with each other. Some isoforms may be tissue-specific. Two different pseudogenes of this gene are found on chromosome 19. [provided by RefSeq, Jul 2014]

Product images:



Circular map for MG215608