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Product datasheet for MG206899

Cmas (NM_009908) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cmas (NM_009908) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cmas
Synonyms:	AW208911; CMPNeu5Ac; D6Bwg0250e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG206899 representing NM_009908, codon optimized.
Due to the complexity of NM_009908, the ORF clone is codon optimized for mammalian Expression.
The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGACGCCCTTGAAAAGGGTGCAGCAACATCCGGCCCTGCTCCAAGGGGACGGCCTTCTCGCGGCCGGC
CACCAAAGCTTCAAAGGTCAAGGGGCGCGGGAAGAGGTCTCGAGAAACCACCCCACTTGGCAGCACTTGT
GCTGGCCCGGGGGGGAAGCAAGGGGATCCCTCTGAAGAACATAAAGAGGTTGGCTGGGGTGCCTCTGATC
GGCTGGGTCCTTCGGGCTGCGCTGGATGCTGGAGTTTTCCAGTCCGTGTGGGTATCTACAGACCATGACG
AAATCGAAAACGTAGCCAAACAGTTTGGAGCCCAGGTGCACAGGAGAAGTTCAGAAACAAGTAAGGATTC
CAGTACAAGCCTGGACGCCATCGTGGAATTTCTGAATTACCACAATGAAGTGGATATCGTTGGCAACATC
CAGGCCACGAGCCCCTGCCTGCACCCAACAGATCTGCAGAAGGTGGCCGAGATGATCAGGGAGGAAGGGT
ATGATAGTGTTTTCTCTGTTGTCCGGAGGCATCAGTTCCGGTGGTCCGAGATTCAAAAGGGGGTGCGGGA
AGTGACAGAACCACTCAACCTCAACCCTGCCAAGCGCCCTCGCCGACAGGATTGGGATGGAGAACTGTAT
GAAAACGGGTCTTTTTATTTCGCCAAACGCCACCTGATAGAAATGGGGTACCTGCAGGGAGGCAAGATGG
CATATTACGAGATGAGAGCAGAACACTCCGTGGATATCGACGTGGATATCGACTGGCCCATCGCCGAGCA
GAGGGTTCTGCGATTTGGCTACTTCGGTAAGGAAAAGTTGAAGGAGATCAAGCTCCTGGTGTGTAACATC
GACGGCTGCTTGACCAACGGACATATCTATGTGTCCGGTGACCAGAAAGAGATCATCTCCTACGATGTGA
AAGATGCTATCGGTATTAGTCTGTTGAAAAAATCTGGCATCGAGGTTCGATTGATTTCTGAGAGAGCTTG
CAGTAAGCAGACTCTCTCTGCACTGAAACTCGATTGCAAAACGGAAGTTTCCGTGTCTGACAAGCTGGCA
ACTGTGGATGAGTGGCGCAAAGAGATGGGCCTGTGTTGGAAGGAAGTGGCTTATCTGGGGAATGAAGTTT
CCGATGAAGAGTGCCTGAAGCGCGTGGGACTGTCCGCAGTACCAGCTGATGCATGTAGTGGCGCCCAGAA
GGCCGTCGGCTATATCTGCAAGTGTAGCGGTGGAAGAGGCGCCATCCGCGAATTCGCAGAGCATATTTTT
CTCCTGATTGAGAAGGTCAATAATTCCTGCCAAAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

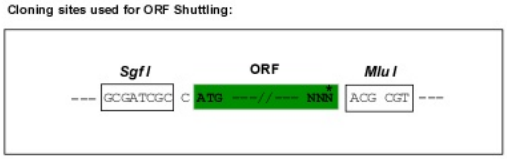
>MG206899 representing NM_009908
Red=Cloning site Green=Tags(s)

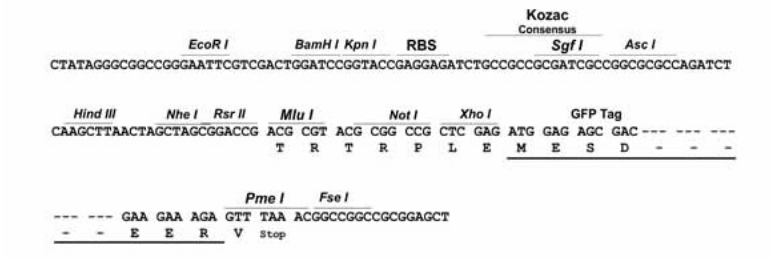
MDALEKGAATSGPAPRGRPSRGRPPKLQRSRGAGRGLEKPPHLAALVLARGGSKGIPLKNIKRLAGVPLI
GWVLRAALDAGVFQSVWVSTDHDEIENVAKQFGAQVHRRSSETSKDSSTSLDAIVEFLNYHNEVDIVGNI
QATSPCLHPTDLQKVAEMIREEGYDSVFSVVRRHQFRWSEIQKGVREVTEPLNLNPAKRPRRQDWDGELY
ENGSFYFAKRHLIEMGYLQGGKMAYYEMRAEHSVDIDVDIDWPIAEQRVLRFGYFGKEKLKEIKLLVCNI
DGCLTNGHIYVSGDQKEIISYDVKDAIGISLLKKSGIEVRLISERACSKQTLSALKLDCKTEVSVSDKLA
TVDEWRKEMGLCWKEVAYLGNEVSDEECLKRVGLSAVPADACSGAQKAVGYICKCSGGRGAIREFAEHIF
LLIEKVNNSCQK

TRTRPLE - GFP Tag - V

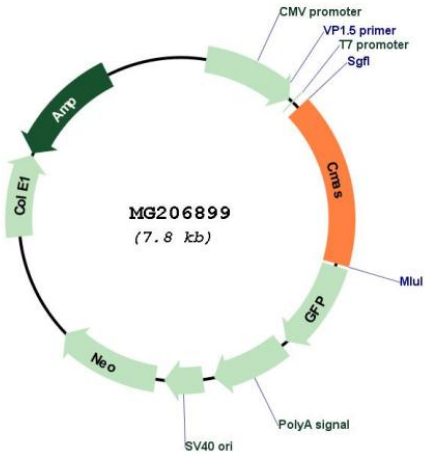
Restriction Sites: SgfI-MluI

Cloning Scheme:





Plasmid Map:



ACCN:	NM_009908
ORF Size:	1296 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_009908.2, NP_034038.2
RefSeq Size:	1760 bp
RefSeq ORF:	1299 bp
Locus ID:	12764
UniProt ID:	Q99KK2
Cytogenetics:	6 74.66 cM
Gene Summary:	Catalyzes the activation of N-acetylneuraminic acid (NeuNAc) to cytidine 5'-monophosphate N-acetylneuraminic acid (CMP-NeuNAc), a substrate required for the addition of sialic acid. Has some activity toward NeuNAc, N-glycolylneuraminic acid (Neu5Gc) or 2-keto-3-deoxy-D-glycero-D-galacto-nononic acid (KDN).[UniProtKB/Swiss-Prot Function]