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Product datasheet for RC223608

CMAS (NM_018686) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CMAS (NM_018686) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CMAS
Synonyms:	CSS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC223608 representing NM_018686
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGACTCGGTGGAGAAGGGGGCCGCCACCTCCGTCTCCAACCCGCGGGGGCGACCGTCCCGGGGCCGGC
CGCCGAAGCTGCAGCGCAACTCTCGCGGCGGCCAGGGCCGAGGTGTGGAGAAGCCCCCGCACCTGGCAGC
CCTAATTCTGGCCCGGGGAGGCAGCAAAGGCATCCCCCTGAAGAACATTAAGCACCTGGCGGGGGTCCCG
CTCATTGGCTGGGTCCTGCGTGCGGCCCTGGATTCAGGGGCCTTCCAGAGTGTATGGGTTTCGACAGACC
ATGATGAAATTGAGAATGTGGCCAAACAATTTGGTGCACAAGTTCATCGAAGAAGTTCTGAAGTTTCAAA
AGACAGCTCTACCTCACTAGATGCCATCATAGAATTTCTTAATTATCATAATGAGGTTGACATTGTAGGA
AATATTCAAGCTACTTCTCCATGTTTACATCCTACTGATCTTCAAAAAGTTGCAGAAATGATTCGAGAAG
AAGGATATGATTCTGTTTTCTCTGTTGTGAGACGCCATCAGTTTCGATGGAGTGAAATTCAGAAAGGAGT
TCGTGAAGTGACCGAACCTCTGAATTTAAATCCAGCTAAACGGCCTCGTCGACAAGACTGGGATGGAGAA
TTATATGAAAATGGCTCATTTTATTTTGCTAAAAGACATTTGATAGAGATGGGTTACTTGCAGGGTGGAA
AAATGGCATACTACGAAATGCGAGCTGAACATAGTGTGGATATAGATGTGGATATTGATTGGCCTATTGC
AGAGCAAAGAGTATTAAGATATGGCTATTTTGGCAAAGAGAAGCTTAAGGAAATAAAACTTTTGGTTTGC
AATATTGATGGATGTCTCACCAATGGCCACATTTATGTATCAGGAGACCAAAAAGAAATAATATCTTATG
ATGTAAAAGATGCTATTGGGATAAGTTTATTAAAGAAAAGTGGTATTGAGGTGAGGCTAATCTCAGAAAG
GGCCTGTTCAAAGCAGACGCTGTCTTCTTTAAAACTGGATTGCAAAATGGAAGTCAGTGTATCAGACAAG
CTAGCAGTTGTAGATGAATGGAGAAAAGAAATGGGCCTGTGCTGGAAAGAAGTGGCATATCTTGGAAATG
AAGTGTCTGATGAAGAGTGCTTGAAGAGAGTGGGCCTAAGTGGCGCTCCTGCTGATGCCTGTTCTACTGC
CCAGAAGGCTGTTGGATACATTTGCAAATGTAATGGTGGCCGTGGTGCCATCCGAGAATTTGCAGAGCAC
ATTTGCCTACTAATGGAAAAGGTTAATAATTCATGCCAAAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC223608 representing NM_018686
Red=Cloning site Green=Tags(s)

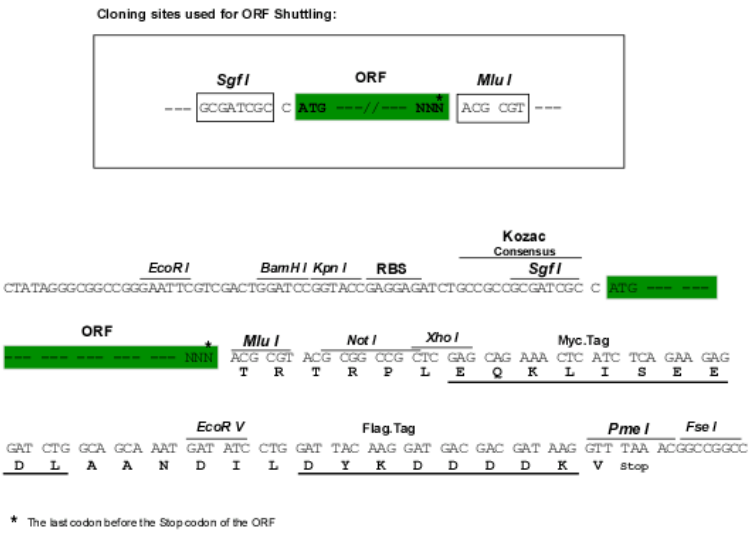
MDSVEKGAATSVSNPRGRPSRGRPPKLQRNSRGGQGRGVEKPPHLAALILARGGSKGIPLKNIKHLAGVP
LIGWVLRAALDSGAFQSVWVSTDHDEIENVAKQFGAQVHRRSSEVSKDSSTSLDAIIEFLNYHNEVDIVG
NIQATSPCLHPTDLQKVAEMIREEGYDSVFSVVRRHQFRWSEIQKGVREVTEPLNLNPAKRPRRQDWDGE
LYENGSFYFAKRHLIEMGYLQGGKMAYYEMRAEHSVDIDVDIDWPIAEQRVLRYGYFGKEKLKEIKLLVC
NIDGCLTNGHIYVSGDQKEIISYDVKDAIGISLLKKSGIEVRLISERACSKQTLSSLKLDCKMEVSVSDK
LAVVDEWRKEMGLCWKEVAYLGNEVSDEECLKRVGLSGAPADACSTAQKAVGYICKCNGGRGAIREFAEH
ICLLMEKVNNSCQK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6157_h02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018686

ORF Size: 1302 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_018686.6

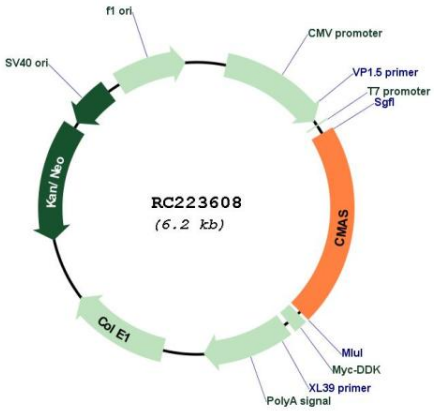
RefSeq Size: 1741 bp

RefSeq ORF: 1305 bp

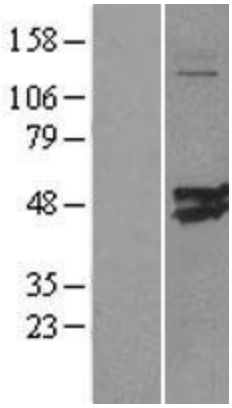
Locus ID: 55907

UniProt ID:	Q8NFW8
Cytogenetics:	12p12.1
Domains:	CTP_transf_3
Protein Pathways:	Amino sugar and nucleotide sugar metabolism, Metabolic pathways
MW:	48.2 kDa
Gene Summary:	This gene encodes an enzyme that converts N-acetylneuraminic acid (NeuNAc) to cytidine 5'-monophosphate N-acetylneuraminic acid (CMP-NeuNAc). This process is important in the formation of sialylated glycoprotein and glycolipids. This modification plays a role in cell-cell communications and immune responses. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2016]

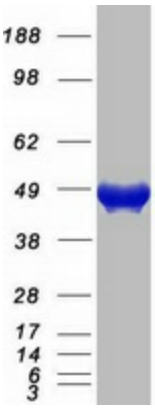
Product images:



Circular map for RC223608



Western blot validation of overexpression lysate (Cat# [LY402711]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223608 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CMAS protein (Cat# [TP323608]). The protein was produced from HEK293T cells transfected with CMAS cDNA clone (Cat# RC223608) using MegaTran 2.0 (Cat# [TT210002]).