

## Product datasheet for **RC234237**

### EMA (MUC1) (NM\_001204286) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EMA (MUC1) (NM_001204286) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EMA
Synonyms:	ADMCKD; ADMCKD1; ADTKD2; CA 15-3; CD227; EMA; H23AG; KL-6; MAM6; MCD; MCKD; MCKD1; MUC-1; MUC-1/SEC; MUC-1/X; MUC1/ZD; PEM; PEMT; PUM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC234237 representing NM\_001204286  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGACACCGGGCACCCAGTCTCCTTTCTCCTGCTGCTGCTCCTCACAGTGCTTACAGCTACCACAGCCC  
 CTAACCCGCAACAGTTGTTACGGGTTCTGGTCATGCAAGCTCTACCCCAGGTGGAGAAAAGGAGACTTC  
 GGCTACCCAGAGAAGTTCACTGCCAGCTCTACTGAGAAGAATGCTGTGAGTATGACCAGCAGCGTACTC  
 TCCAGCCACAGCCCCGGTTCAGGCTCCTCCACCACTCAGGGACAGGATGTCACTCTGGCCCCGGCCACGG  
 AACAGCTTCAGGTTCACTGCCACCTGGGACAGGATGTACCTCGGTCCCAGTACCAGGCCAGCCCT  
 GGGCTCCACCACCCGCCAGCCACGATGTACCTCAGCCCCGGACAACAAGCCAGCCCCGGGCTCCACC  
 GCCCCCCAGCCACGGTGTACCTCGGCCCGGACACCAGGCCGGCCCCGGGCTCCACCGCCCCCCCAG  
 CCCATGGTGTACCTCGGCCCGGACAACAGGCCCGCCTTGGGCTCCACCGCCCTCCAGTCCACAATGT  
 CACCTCGGCTCAGGCTCTGCATCAGGCTCAGTTCTACTCTGGTGCACAACGGCACCTCTGCCAGGGCT  
 ACCACAACCCAGCCAGCAAGAGCACTCCATTCTCAATCCAGCCACCACTCTGATACTCTACCACCC  
 TTGCCAGCCATAGCACCAGACTGATGCCAGTAGCACTACCATAGCACGGTACCTCCTCTCACCTCCTC  
 CAATCACAGCACTTCTCCCCAGTTGTCTACTGGGGTCTCTTTCTTTTCTGTCTTTTACATTTCAAAC  
 CTCCAGTTTAATTCCTCTCTGGAAGATCCAGCACCGACTACTACCAAGAGCTGCAGAGAGACATTTCTG  
 AAATGTTTTTGCAGATTTATAACAAGGGGTTTTCTGGGCTCTCCAATATTAAGTTTCAAGCCAGGATC  
 TGTGGTGTACAATTGACTCTGGCCTCCGAGAAGGTACCATCAATGTCCAGCAGTGGAGACACAGTTC  
 AATCAGTATAAAACGGAAGCAGCCTCTCGATATAACCTGACGATCTCAGACGTCAAGCGTGTGATGTC  
 CATTTCCTTTCTCTGCCAGTCTGGGGTGGGGTCCAGGCTGGGGCATCGCGCTGCTGGTGTGTCG  
 TGTCTGGTTGCGCTGGCATTGTCTATCTCATTGCCTTGGCTGTCTGTCAAGTCCGCCGAAAGAATAAC  
 GGGCAGCTGGACATCTTTCCAGCCCGGATACCTACCATCCTATGAGCGAGTACCCACCTACCACACC  
 ATGGGCGCTATGTCCCCCTAGCAGTACCGATCGTAGCCCTATGAGAAGGTTTCTGCAGGTAATGGTGG  
 CAGCAGCTCTTTACACAAACCCAGCAGTGGCAGCCACTTCTGCCAACTTG

**ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT**  
**ACAAGGATGACGACGATAAGGTTTAA**

**Protein Sequence:**

>RC234237 representing NM\_001204286  
 Red=Cloning site Green=Tags(s)

MTPGTQSPFFLLLLLTVLTATTAPKPATVVTGSGHASSTPGGEKETSATQRSSVPSSTEKNAVSMSSVL  
 SSHSPGSGSSTTQGDVTLAPATEPASGSAATWGQDVTSPVTRPALGSTTPPAHDVTSAPDNKPAPGST  
 APPAHGVTAPDTRPAGSTAPPAHGVTAPDNRPALGSTAPPVHNVTASGSASGSASTLVHNGTSARA  
 TTPASKSTPFSIPSHSDPTTLASHSTKTDASSTHSTVPPLTSSNHSTSPQLSTGVSTFFLFSHISN  
 LQFNSSLEDPSTDYYQELQRDISEMFLQIYKGGFLGLSNIKFRPGSVVQLTLAFREGTINVHDVETQF  
 NQYKTEAASRYNLTISDVSVDVPPFSAQSGAGVPGWGIALLVLCVLVALAIVYLIALAVCQCRKNY  
 GQLDIFPARDTYHPMSEYPTYHTHGRYVPPSSDRSPYEKVSAGNGGSSLSYTNPAVAATSANL

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**

**ACCN:**

NM\_001204286

**ORF Size:**

1452 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).

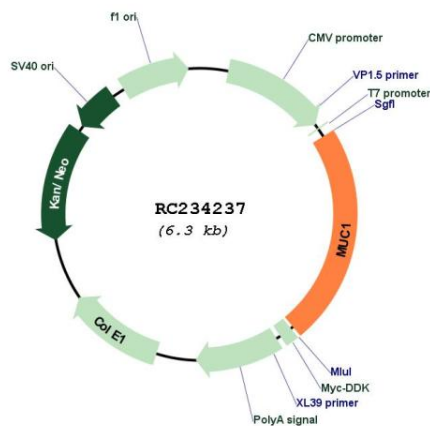
**Reconstitution Method:**

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\\_001204286.1](#), [NP\\_001191215.1](#)  
**RefSeq Size:** 1853 bp  
**RefSeq ORF:** 1455 bp  
**Locus ID:** 4582  
**UniProt ID:** [P15941](#)  
**Cytogenetics:** 1q22  
**Protein Families:** Druggable Genome, Secreted Protein, Transmembrane  
**MW:** 50.5 kDa

**Gene Summary:** This gene encodes a membrane-bound protein that is a member of the mucin family. Mucins are O-glycosylated proteins that play an essential role in forming protective mucous barriers on epithelial surfaces. These proteins also play a role in intracellular signaling. This protein is expressed on the apical surface of epithelial cells that line the mucosal surfaces of many different tissues including lung, breast stomach and pancreas. This protein is proteolytically cleaved into alpha and beta subunits that form a heterodimeric complex. The N-terminal alpha subunit functions in cell-adhesion and the C-terminal beta subunit is involved in cell signaling. Overexpression, aberrant intracellular localization, and changes in glycosylation of this protein have been associated with carcinomas. This gene is known to contain a highly polymorphic variable number tandem repeats (VNTR) domain. Alternate splicing results in multiple transcript variants.[provided by RefSeq, Feb 2011]

### Product images:



Circular map for RC234237