

Product datasheet for **RG221340**

EMA (MUC1) (NM_002456) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EMA (MUC1) (NM_002456) Human Tagged ORF Clone
Tag:	TurboGFP
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-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG221340 representing NM_002456 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACACCGGGCACCCAGTCTCCTTTCTTCTGCTGCTGCTCCTCACAGTGCTTACAGTTGTTACGGGTT
CTGGTCATGCAAGCTCTACCCAGGTGGAGAAAAGGAGACTTCGGCTACCCAGAGAAGTTCAGTGCCAG
CTCTACTGAGAAGAATGCTTTGTCTACTGGGTCTCTTTCTTTTCTGTCTTTTACATTTCAAACCTC
CAGTTTAAATTCCTCTCTGGAAGATCCCAGCACCGACTACTACCAAGAGCTGCAGAGAGACATTTCTGAAA
TGTTTTTGCAGATTTATAACAAGGGGTTTTCTGGCCTCTCCAATATTAAGTTCAGGCCAGGATCTGT
GGTGGTACAATTGACTCTGGCCTCCGAGAAGGTACCATCAATGTCCACGACGTGGAGACACAGTTCAAT
CAGTATAAACCGAAGCAGCCTCTCGATATAACCTGACGATCTCAGACGTCAGCGTGAGTGATGTGCCAT
TTCTTTTCTCTGCCAGTCTGGGCTGGGTGCCAGGCTGGGCATCGCGCTGCTGGTGTGGTCTGTGT
TCTGGTTGCGCTGGCCATTGTCTATCTATTGCCTTGGCTGTCTGTGAGTCCGCCGAAAGAACTACGGG
CAGCTGGACATCTTTCCAGCCCGGATACCTACCATCCTATGAGCGAGTACCCACCTACCACCCCATG
GGCGCTATGTGCCCTAGCAGTACCGATCGTAGCCCTATGAGAAGGTTTCTGCAGGTAATGGTGGCAG
CAGCCTCTTTACACAAACCCAGCAGTGGCAGCCACTTCTGCCAATTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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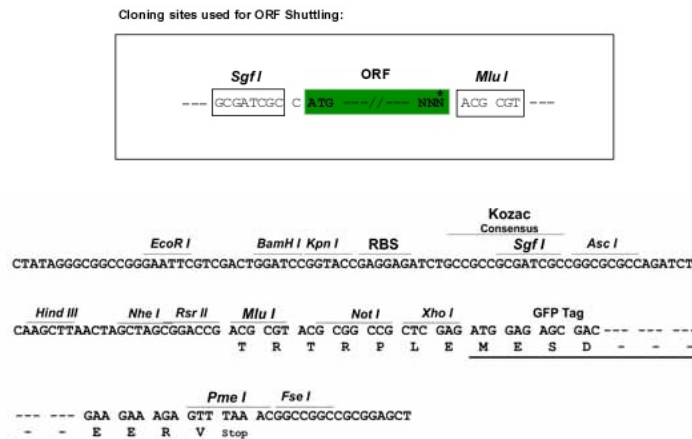
Protein Sequence: >RG221340 representing NM_002456
Red=Cloning site Green=Tags(s)

MTPGTQSPFFLLLLLTVLTVVTGSGHASSTPGGEKETSATQRSSVPSSTEKNALSTGVSFFFLSFHISNL
 QFNSSLEDPSTDYYQELQRDISEMFLQIYKQGGFLGLSNIKFRPGSVVVQLTLAFREGTINVHDVETQFN
 QYKTEAASRYNLTISDVSVDVPPFSAQSGAGVPGWGIALLVLCVLVALAIVYLIALAVCQCRRKNYG
 QLDIFPARDTYHPMSEYPTYHTHGRYVPPSSDRSPYEKVSAGNGGSSLSYTNPVAATSANL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002456

ORF Size: 819 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_002456.6](#)

RefSeq Size: 1209 bp

RefSeq ORF: 822 bp

Locus ID: 4582

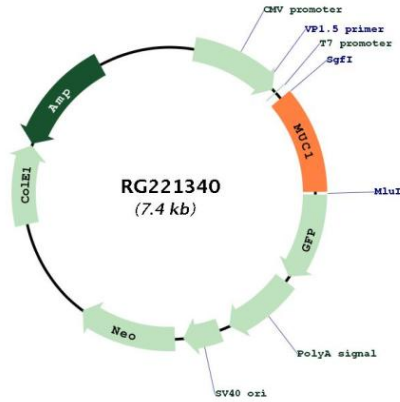
UniProt ID: [P15941](#)

Cytogenetics: 1q22

Protein Families: Druggable Genome, Secreted Protein, Transmembrane

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 RG221340