

## **Product datasheet for RG219922**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## EMA (MUC1) (NM\_001018017) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: EMA (MUC1) (NM 001018017) 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 >RG219922 representing NM\_001018017

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGACACCGGGCACCCAGTCTCCTTTCTTCCTGCTGCTGCTCCTCACAGTGCTTACAGTTGTTACAGGTT
CTGGTCATGCAAGCTCTACCCCAGGTGGAGAAAAGGAGACTTCGGCTACCCAGAGAAAGTTCAGTGCCCAG
CTCTACTGAGAAGAATGCTTTTAATTCCTCTCTGGAAGATCCCAGCACCGACTACTACCAAGAGCTGCAG
AGAGACATTTCTGAAATGTTTTTGCAGATTTATAAACAAGGGGGTTTTCTGGGCCTCCCAATATTAAGT
TCAGGCCAGGATCTGTGGTGGTACAATTGACTCTGGCCTTCCGAGAAGGTACCATCAATGTCCACGACGT
GGAGACACAGTTCAATCAGTATAAAACGGAAGCAGCCTCTCGATATAAACCTGACGATCTCAGACGTCAGC
GTGAGTGATGTGCCCATTTCCTTTCTCTGCCCAGTCTGGGGCTGGGGTGCCAGGCTGGGGCATCGCGCTGC
CCGAAAGAACTACGGGCAGCTGGACATCTTTCCAGCCCGGGATACCCTACCATCCTATGAGCGAGTACCCC
ACCTACCACACCCATGGGCGCTATGTGCCCCCTAGCAGTACCGATCGTAGCCCCTATGAGAAGGTTTCTG
CAGGTAATGGTGGCAGCAGCCTCTCTTACACAAACCCAGCAGTGGCAGCCACTTCTGCCAACTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA





Protein Sequence: >RG219922 representing NM\_001018017

Red=Cloning site Green=Tags(s)

MTPGTQSPFFLLLLLTVLTVVTGSGHASSTPGGEKETSATQRSSVPSSTEKNAFNSSLEDPSTDYYQELQ RDISEMFLQIYKQGGFLGLSNIKFRPGSVVVQLTLAFREGTINVHDVETQFNQYKTEAASRYNLTISDVS VSDVPFPFSAQSGAGVPGWGIALLVLVCVLVALAIVYLIALAVCQCRRKNYGQLDIFPARDTYHPMSEYP TYHTHGRYVPPSSTDRSPYEKVSAGNGGSSLSYTNPAVAATSANL

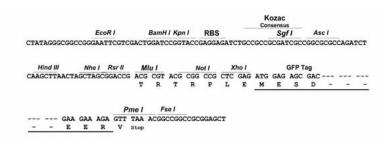
TRTRPLE - GFP Tag - V

**Restriction Sites:** 

Sgfl-Mlul

**Cloning Scheme:** 





**ACCN:** NM\_001018017

ORF Size: 765 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: <u>NM 001018017.1</u>, <u>NP 001018017.1</u>

 RefSeq Size:
 1155 bp

 RefSeq ORF:
 768 bp

 Locus ID:
 4582

 UniProt ID:
 P15941

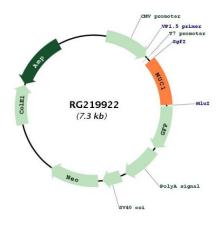
 Cytogenetics:
 1q22

**Protein Families:** Druggable Genome, Secreted Protein, Transmembrane

**Gene Summary:** This gene encodes a r

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 RG219922