

Product datasheet for **RG223848**

EMA (MUC1) (NM_001044391) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: EMA (MUC1) (NM_001044391) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: MUC1
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: >RG223848 representing NM_001044391
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACACCGGGCACCCAGTCTCCTTTCTTCTGCTGCTGCTCCTCACAGTGCTTACAGTTGTTACGGGTT
CTGGTCATGCAAGCTCTACCCAGGTGGAGAAAAGGAGACTTCGGCTACCCAGAGAAGTTCAGTGCCCGAG
CTCTACTGAGAAGAATGCTTTTAATTCCTCTCTGGAAGATCCCAGCACCGACTACTACCAAGAGCTGCAG
AGAGACATTTCTGAAATGGCTGTCTGTCTGAGTCCCGCCGAAAGAACTACGGGCAGCTGGACATCTTTCCAG
CCCGGGATACCTACCATCCTATGAGCGAGTACCCACCTACCACACCCATGGGCGCTATGTGCCCCCTAG
CAGTACCGATCGTAGCCCTATGAGAAGTTTCTGCAGGTAATGGTGGCAGCAGCCTCTCTACACAAC
CCAGCAGTGGCAGCCACTTCTGCCAATTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG223848 representing NM_001044391
Red=Cloning site Green=Tags(s)
MTPGTQSPFFLLLLLVLTVVVTGSGHASSTPGGEKETSATQRSSVPSSTEKNAFNSSLEDPSTDYYQELQ
RDISEMAVCQCRKKNYQLDIFPARDTYHPMSEYPTYHTHGRYVPPSSTDRSPYEKVSAGNGGSSLSYTN
PAVAATSANL

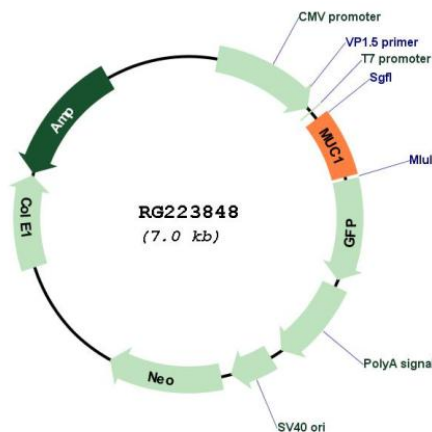
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001044391

ORF Size: 450 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:	<ol style="list-style-type: none">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_001044391.3</u>
RefSeq Size:	846 bp
RefSeq ORF:	453 bp
Locus ID:	4582
UniProt ID:	<u>P15941</u>
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]