

# **Product datasheet for SC311446**

### 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\_001044391) Human Untagged Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: EMA (MUC1) (NM\_001044391) Human Untagged Clone

Tag: Tag Free 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-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC311446 representing NM\_001044391.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGACACCGGGCACCCAGTCTCCTTTCTTCCTGCTGCTGCTCCTCACAGTGCTTACAGTTGTTACGGGT
TCTGGTCATGCAAGCTCTACCCCAGGTGGAGAAAAGGAGACTTCGGCTACCCAGAGAAGTTCAGTGCCC
AGCTCTACTGAGAAGAATGCTTTTAATTCCTCTCTGGAAGATCCCAGCACCGACTACTACCAAGAGCTG
CAGAGAGACATTTCTGAAATGGCTGTCTGTCAGTGCCGCCGAAAGAACTACGGGCAGCTGGACATCTTT
CCAGCCCGGGATACCTACCATCCTATGAGCGAGTACCCCACCCTACCACACCCATGGGCGCTATGTGCCC
CCTAGCAGTACCGATCGTAGCCCCTATGAGAAGGTTTCTGCAGGTAATGGTGGCAGCAGCCTCTCTTAC

ACAAACCCAGCAGTGGCAGCCACTTCTGCCAACTTGTAG

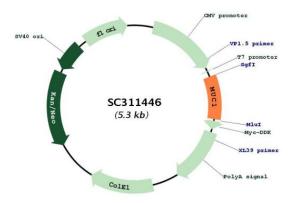
**ACGCGTACGCGGCCGCTC**GAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

**Restriction Sites:** Sgfl-Mlul



#### Plasmid Map:



ACCN: NM 001044391

Insert Size: 453 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

> point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

> into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube Components:

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.



#### EMA (MUC1) (NM\_001044391) Human Untagged Clone - SC311446

**RefSeq:** <u>NM 001044391.2</u>

 RefSeq Size:
 851 bp

 RefSeq ORF:
 453 bp

 Locus ID:
 4582

 UniProt ID:
 P15941

 Cytogenetics:
 1q22

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

**MW:** 16.3 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]

Transcript Variant: This variant (6) has multiple differences but maintains the reading frame, compared to variant 1. These differences result in a shorter isoform (6), compared to isoform

1.