

Product datasheet for SC311458

OriGene Technologies, Inc.

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EMA (MUC1) (NM 001044390) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: EMA (MUC1) (NM_001044390) Human Untagged Clone

Tag: Tag Free 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

Vector: pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for NM_001044390, the custom clone sequence may differ by one or

more nucleotides

GCCAACTTGTAG

Restriction Sites: Please inquire ACCN: NM 001044390

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.

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 001044390.1</u>, <u>NP 001037855.1</u>

RefSeq Size: 1005 bp
RefSeq ORF: 612 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]

Transcript Variant: This variant (5) has multiple differences which result in a frameshift in the central coding region, compared to variant 1. These differences result in a shorter isoform (5),

compared to isoform 1.