

Product datasheet for **RG222229**

MUC4 (NM_138297) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MUC4 (NM_138297) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MUC4
Synonyms:	ASGP; HSA276359; MUC-4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG222229 representing NM_138297 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

>RG222229 representing NM_138297
 Red=Cloning site Green=Tags(s)

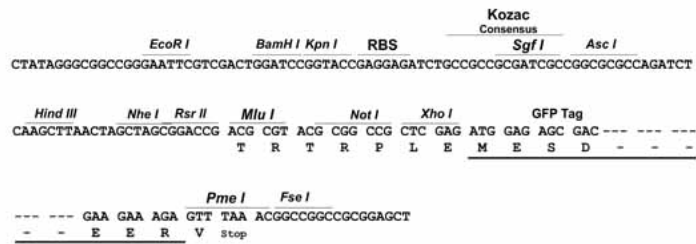
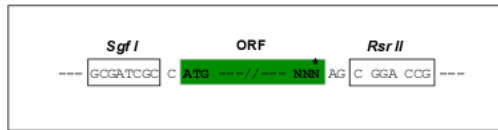
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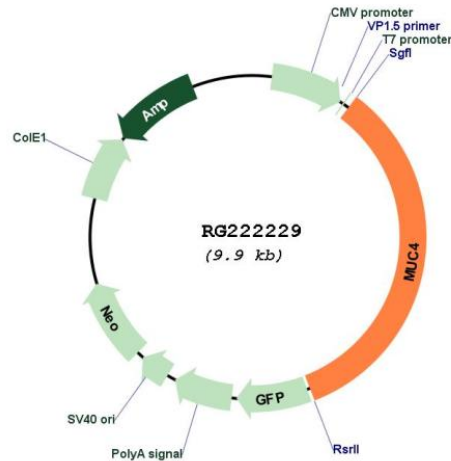
SGPTRRRLE – GFP Tag – V

Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_138297

ORF Size: 3375 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_138297.5](#)

RefSeq Size: 3958 bp

RefSeq ORF: 3378 bp

Locus ID: 4585

UniProt ID: [Q99102](#)

Cytogenetics: 3q29

Protein Families: Druggable Genome, Transmembrane

Gene Summary: The major constituents of mucus, the viscous secretion that covers epithelial surfaces such as those in the trachea, colon, and cervix, are highly glycosylated proteins called mucins. These glycoproteins play important roles in the protection of the epithelial cells and have been implicated in epithelial renewal and differentiation. This gene encodes an integral membrane glycoprotein found on the cell surface, although secreted isoforms may exist. At least two dozen transcript variants of this gene have been found, although for many of them the full-length transcript has not been determined or they are found only in tumor tissues. This gene contains a region in the coding sequence which has a variable number (>100) of 48 nt tandem repeats. [provided by RefSeq, Jul 2008]