

## Product datasheet for **SC303494**

### MUC4 (NM\_004532) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MUC4 (NM\_004532) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** MUC4  
**Synonyms:** ASGP; HSA276359; MUC-4  
**Vector:** pCMV6 series

**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_004532, the custom clone sequence may differ by one or more nucleotides

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ATGAAGGGGGCACGCTGGAGGAGGGTCCCCTGGGTGTCCCTGAGCTGCCTGTGTCTCTGC
CTCCTTCCGCATGTGGTCCCAGGAATGACAACACCGTCACTGAAGACAGACGGTGGGAGA
CGCACAGCCACATCACCACCCCCACAACCTCCCAGACCATATTTCCACCATTCCCAGC
ACTGCCATGCACACCCGCTCCACAGCTGCCCCATCCCCTCCTGCCTGAGAGAGGAGTT
TCCCTCTCCCCTATGGGGCAGGCGCCGGGACCTGGAGTTCGTCAGGAGGACCGTGGAC
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TCCCTCTACTTTCACAGACAATGGCCAGATCATCTTCCCAGAGTCAGACTACCAGATTTTC
TCCACCCCAACCCACTCCCAACAGGCTTACAGGCCGGGACCCCTGTGGCCCTGGTGGCT
CCGTTCTGGGACGATGCTGACTTCTCCACTGGTCGGGGGACCACATTTTATCAGGAATAC
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GCCCAGCGCTCAGGCAACCCGGTGTCTATGGGCTTCTCTAGTGGAGATGGCTATTTGAA
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TCCAACCTCAGGCCTCCAAGGGCTGCAGTTCTACAGGCTACACCGGAAGAAGGCCCAAC
TACCGTCTCGAGTGCCTGCAGTGGCTGAAGAGCCAGCCTCGGTGGCCAGCTGGGGCTGG
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CGTCTTGGCAGTTGGCCAGGAACCTGGAGCCACAGAGCTGGTGTGCCGCTGGAATGAC
AAGCCCTACCTCTGTGCCCTGTACCAGCAGAGGGCGGCCACGTGGGCTGTGCTACATAC
AGGCCCCACAGCCCGCTGGATGTTTCGGGGACCCCAACATCACCACCTGGATGGTGTG
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GCCTTTGCGGCTCAGTACCGCTCCAGCAGCCTGGGCCCGTACCGGTCCAATGGCTCCTT
GAGCCTCAGCAGCAATCCGTGTCTGTGGATAACCAGACTGTGACATTTACGCCTGAC
CATGAAGACGGCGGAGGCCAGGAGACGTTCAACGCCACCGGAGTCTCCTGAGCCGCAAC
GGCTCTGAGGTCTCGCCAGCTTCGACGGCTGGGCCACCGTCTCGGTGATCGCGCTCTCC

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AACATCTCCACGCCTCCGCCAGCCTCCCGCCGAGTACCAGAACCGCACGGAGGGGCTC
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CCCCCAGGGAGCCCTGAGGAGATGCTTTTCCACTTTGGAATGACCTGGCAGATCAACGGG
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TCACAAC TGCAAAAAACAGCTCCTGGGCTGAACATTTGATCTCCAACCTGTGACGGAGAT
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CAGACTCTGGGCTGTACGCCATGTGCACCTGCCCCAGCCTTCACTGACAGCCGCTGC
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GATTCTGCAGCACCGCCTCGGGAAGCCCATCCAACACTGGATGGTCATCTCGGAGTTC
CAGTACCGCCCTCGGGGCCGGTCATTGACTTCTGAACAACAGCTGCTGGCCGGGTG
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TTCCAGCCCATCTCCGGGAAGACGTGCGCGATGTGACAGCCCTGAACGTGAGCAGCTG
AAGGCTTACTTCAGATGCGATGGCTACAAGGGCTACGACCTGGTCTACAGCCCCAGAGC
GGCTTACCTGCGTGTCCCGTGCAGTAGGGGCTACTGTGACCATGGAGGCCAGTGCCAG
CACCTGCCAGTGGGCCCGCTGCAGCTGTGTCTTCTCCATCTACACGGCCTGGGGC
GAGCACTGTGAGCACCTGAGCATGAACTCGACGCGTTCTTCGGCATCTTTGGGGCC
CTGGGGCGCCTTTGCTGCTGGGGTGGGACGTTCTGGTCTGCGCTCTGGGGTTGC
TCCGGGGCCAGGTTCTCCTATTTCTGAACTCAGCTGAGGCCTTGCCCTGA

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- Restriction Sites:** Please inquire
- ACCN:** NM\_004532
- 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:** [NM\\_004532.2](#), [NP\\_004523.2](#)

**RefSeq Size:** 4411 bp

**RefSeq ORF:** 3531 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]

Transcript Variant: This variant (4), also called MUC4/Y, lacks coding exon 2 as compared to transcript variant 1. As a result, variant 4 encodes isoform d, which has the same N- and C-termini as isoform a encoded by variant 1. Isoform d, thought to be a membrane-bound protein, lacks the variable length, highly glycosylated region found in isoform a.