

Product datasheet for **MG210420**

Col8a1 (NM_007739) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Col8a1 (NM_007739) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Col8a1
Synonyms:	Col8a-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>MG210420 representing NM_007739
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGC**C

ATGGCACTGCCACCCAGGCCTCTACAGCTGCTGGGAATACTGTTTCATCATTTCCTGAACCTGTGCAGAC
 TCATTCAGGCCGGTGCCTACTATGGAATCAAGCCTCTGCCACCTCAAATCCCTCCTCAGATACCACCACA
 AATTCACAGTACCAGCCCTTGGGCCAGCAAGTCCCTCACATGCCTTTGGGCAAAGATGGCCTTTCCATG
 GGCAAGGAGATGCCTCACATGCAGTATGGCAAAGAGTACCCACACCTACCCCAATATATGAAGGAAATCC
 CACCTGTGCCAAGAAATGGGCAAGGAAGTGGTGCCTCAAAAAGGCAAGGAGAAAGTACCGTTAGCCAGTTT
 GCGCGGAGAACAAAGTCCCGTGGAGAACCTGGACCAAGAGGACCACCTGGGCCGCCAGGTTTACCAGGT
 CATGGAATGCCTGGAATCAAAGGAAAACAGGGCCCCAGGGATATCCAGGAATTGGAAAGCCCGGTATGC
 CTGGAATGCCTGGGAAGCCAGGAGCCATGGGAATGCCAGGGGCAAAAGGCGAAATTGGACCCAAAGGGGA
 AATCGGACCTATGGGAATCCCAGGGCCACAAGGGCCTCCAGGACCTCATGGACTTCTGGCATCGGGAAA
 CCGGGTGGGCCAGGGTTACCAGGGCAACAGGAGCAAAAGGTGAGAGGGGGCCCAAGGACCACCAAGGAC
 CTCCCGGCCTTACAGGTCCCAAGGAGAGAAGGGCTTTGGGATGCCTGGCTTGCAGGTCTGAAGGGTCC
 TCCAGGTATGCATGGCCCTCCTGGACCAAGTTGGACTACCGGGAGTAGGAAAACAGGAGTGACAGGCTTT
 CCTGGACCACAGGGTCCCTGGGGAAGCCAGGGCCTCCAGGGGAACCTGGACCACAAGGCCTTATTGGTG
 TGCCAGGAGTTCAAGGACCTCCTGGGATGCCTGGAGTTGGAAAGCCAGGTGAGATGGGATCCCGGGCCA
 ACCAGGATTTCCGGTGGTAAAGGGGAACAAGGATTGCCAGGGTTGCCTGGACCCCAAGGCCTCCAGGG
 GTCGGAAGCCAGGTTTCCAGGACCCAAAGGGGACCGGGGTATTGGGGTGTCTCTGGGTTCTTGGGC
 CGAGAGGGGAAAAGGACCCATTGGTGCTCTGGAATGGGGGTCCACCTGGAGAGCCAGGCCTACCCGG
 TATCCCGGGTCCCATGGGCCCTCCAGGTGCTATTGGTTTCCCTGGACCCAAAGGAGAAGGTGGAGTTGTA
 GGACCACAGGTCCACCAGGCCCAAGGAGAGCCTGGCCTCCAAGGCTTCCCTGGGAAGCCAGGTTTTTC
 TTGGTGAAGTAGGTCCCTGGCATGAGGGTTTGCCTGGTCTATAGGACCCAAAGGAGAAGGTGGTCA
 CAAAGGGTTGCCAGGGCTTCCCGGTGTTCCAGGGCTGCTTGGACCCAAAGGAGAACCTGGCATACCTGGG
 GATCAGGGTCTACAGGTCCCCAGGGATTCCAGGGATCGTAGGACCTAGTGGCCCTATTGGACCCCTG
 GGATTCGGGGCCCAAGGAGAACCAGGCCTCCAGGGCCCCCTGGGTTCCCTGGTGTAGGGAAGCCAGG
 AGTAGCAGGACTTCATGGGCCCCGGGGAACCTGGTGCCTTGGGCCTCAAGGCCAGCCTGGCCTTCT
 GGACCCCAAGGTCTCCAGGACCCCAAGGCCTCCAGCTGTGATGCCTACACCATCACCCAGGGAGAGT
 ATCTGCCAGATATGGGACTAGGAATTGATGGGGTGAAACCTCCGATGCCTATGCGGGCAAAAAGGGCAA
 ACACGGAGGGCCAGCCTATGAGATGCCTGCGTTTACTGCCGAGCTGACTGTACCTTTCCACCGGTGGGG
 GCCCCAGTGAAGTTTGACAAGCTGCTCTACAACGGCAGACAGAATAAATCCGACAGACAGGCATCTTCA
 CCTGTGAAGTCCCGGTGTCTACTACTTTGCTTATCATGTTCACTGCAAGGGAGGCAACGTATGGTTGC
 TCTCTTCAAGAACAACGAGCCCATGATGTACACATACGACGAGTACAAGAAGGGCTTTCTGGACCAAGCA
 TCTGGAAGCGCAGTACTGCTTCTCCGTCCCGGAGACCAGGTGTTTCTCCAATGCCTTCAGAACAGGCTG
 CTGGACTCTATGCCGGGCAATATGTCCACTCCTCTTTTCAGGATATTTATTGTATCCCATGT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG210420 representing NM_007739
 Red=Cloning site Green=Tags(s)

MALPPRPLQLLGILFIIISLNSVRLIQAGAYYGIKPLPPQIPPQIPPQIPQYQPLGQQVPHMPLGKDGLSM
 GKEMPHMQYGYKYPHLPQYMKIIPPVPRMGKEVVPKKGKEVPLASLRGEQGPRGEPGPRGPPGPPGLPG
 HGMPGIGKPGPGQYGPYIGKPGMPGMPGKPGAMGMPGAKGEIGPKGEIGPMGIPGPGPPGPHGLPGIGK
 PGGPGLPGQPGAKGERGPKGPPGPPGLQGPKGEKGFMPGLPGLKGGPMHGGPPGVPGLPGVGKPGVTGF
 PGPQGPLGKPGPPGEPGQGLIGVPGVQGGPPGMPGVGKPGQDGIQPGPGFPGGKGEQGLPGLPGPPGLPG
 VGKPGFPGPKGDRGIGGVPGVLGPRGEKGPAGPMGGPPGEPGLPGIPGPMGPPGAIGFPGPKGEGGVV
 GPQGGPPGKGEPLQGFPKPGFLGEVGGPMRGLPGPIGPKGEGGHKGLPGLPGVPGLLGPKGEPGIPG
 DQGLQGGPIPGIVGSPGPIGPPGIPGPKGEPGLPGPPGFPVGKPGVAGLHGPPGKPGALGPQQGPGPL
 GPPGPPGPPGPAVMPTPSPQGEYLPDMGLGIDGVKPPHAYAGKKGKHGGPAYEMPAFTAELTVFPFPVG
 APVKFDKLLYNGRQNYNPQTGIFTCEVPGVYFYAYHVHCKGGNVVVALFKNNEPMMYTYDEYKKGFLDQA
 SGSAVLLLRPGDQVFLQMPSEQAAGLYAGQYVHSSFSGYLLYPM

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_007739

ORF Size: 2233 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_007739.2](#), [NP_031765.2](#)

RefSeq Size: 5110 bp

RefSeq ORF: 2235 bp

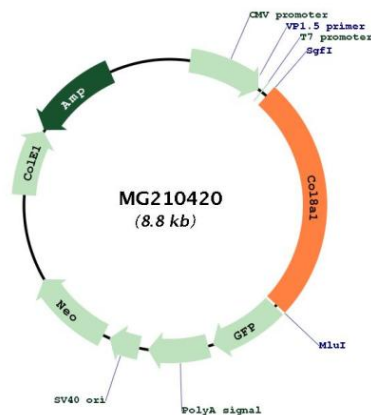
Locus ID: 12837

UniProt ID: [Q00780](#)

Cytogenetics: 16 C1.1

Gene Summary: Macromolecular component of the subendothelium. Major component of the Descemet's membrane (basement membrane) of corneal endothelial cells. Also component of the endothelia of blood vessels. Necessary for migration and proliferation of vascular smooth muscle cells and thus, has a potential role in the maintenance of vessel wall integrity and structure, in particular in atherogenesis.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG210420