

Product datasheet for MR212033

Col4a1 (BC072650) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: Col4a1 (BC072650) Mouse Tagged ORF Clone
 Tag: Myc-DDK
 Symbol: Col4a1
 Synonyms: Bru; Col4a-1; Raw; Svc
 Vector: pCMV6-Entry (PS100001)
 E. coli Selection: Kanamycin (25 ug/mL)
 Cell Selection: Neomycin
 ORF Nucleotide Sequence: >MR212033 representing BC072650
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGGGCCCCGGCTCAGCGTCTGGCTTCTGCTGCTCTTCGCCGCCCTTCTGCTCCACGAGGAGCGCAGCC
 GAGCAGCTGCGAAGGGCGATTGTGGTGGCTCTGGCTGTGAAAAATGTGACTGTCATGGCGTGAAGGGACA
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CACAAGGTTACCCAGGGCTTATAGGCCAGCCTGGAGCTAAGGGAGAGCCTGGAGAGATATTTTTGACAT
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence: >MR212033 representing BC072650
 Red=Cloning site Green=Tags(s)

MGPRLSVWLLLLFAALLLHEERSRAAAKGDCCGSGCGKCDCHGVKQKGERGLPGLQGVIGFPGMQGPEG
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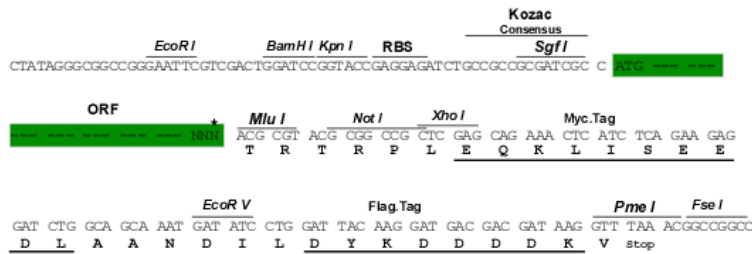
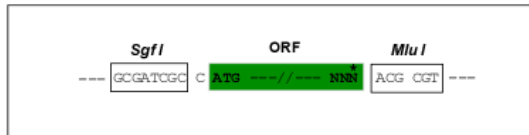
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Restriction Sites:

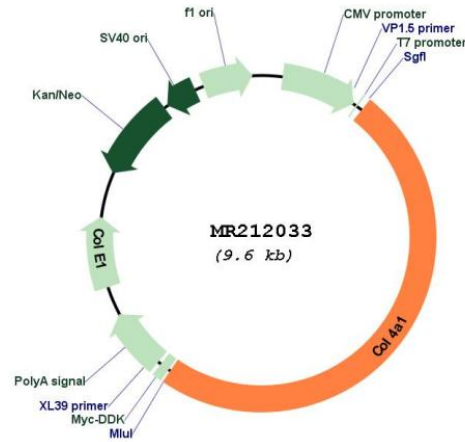
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: BC072650

ORF Size: 4686 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: [BC072650.1](#)

RefSeq Size: 6522 bp

RefSeq ORF: 4688 bp

Locus ID: 12826

Cytogenetics: 8 5.53 cM

MW: 239.1 kDa

Gene Summary: This gene encodes the alpha-1 subunit of the type IV collagens, an essential component of basement membranes. The encoded protein forms a triple helical heterotrimer comprised of two alpha-1 and one alpha-2 subunits that assembles into a type IV collagen network. This gene is located adjacent to the gene encoding alpha-2 subunit. Mice lacking both the alpha-1 and alpha-2 subunits of collagen IV die in utero due to structural deficiencies in the basement membranes and certain mutations in this gene cause perinatal cerebral hemorrhage and porencephaly. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Nov 2015]