

Product datasheet for **MR222881**

Col4a1 (NM_009931) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Col4a1 (NM_009931) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Col4a1
Synonyms: Br; Bru; Col4; Col4a-1; Del(8)44; R; Raw; S; Svc
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR222881 representing NM_009931
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGGCCCCGGCTCAGCGTCTGGCTTCTGCTGCTCTTCGCCGCCCTTCTGCTCCACGAGGAGCGCAGCC
 GAGCAGCTGCGAAGGGCGATTGTGGTGGCTCTGGCTGTGGAAAATGTGACTGTATGGCGTGAAGGGACA
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CCTGGACAACCTGGGGCTAAAGGTGACCGAGGCCTGCCCGGCAGAGATGGTCTTGAAGGATTGCCGGGTC
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR222881 representing NM_009931
Red=Cloning site Green=Tags(s)

MGPRLSVWLLLLFAALLLHEERSRAAAKGDCGGSGCGKCDCHGVKQKGERGLPGLQGVIGFPMQGPPEG
PHGPPGQKGDAGEPGLPGTKGTRGPPGAAGYPGNPGLPGIPGQDPPGPPGIPGCNGTKGERGLGPPGL
PGFSGNP GPPGLPGMKGDPGEILGHVPGTLLKGERGFPGIPGMPGSPGLPGLQGPVGPFGTGP GPPGP
PGPPGEKQMGSSSFQGPKGDKGEQVSGPPGVPGAQVKEKGF APTGEKQKGEFPGVPVGYGEKGE
GKQGPRGKPGKDEKGERGSPGIPGDSYPLPGRQGPQGEKGEAGLPGPPGTIVIGT MPLGEKDRGYPG
APGLRGEPPGKGFPGTPGQPPGFPTPGQAGAPGFPGERGEKGDQGFVSLPGPSGRDGAPPPGPPG
PPGQPGHTNGI VECQPGPPGDQPPGTPGQPLTGEVQKQKGE SCLACDTEGLRGP GPPGQPPGEIGF
PGRDGHPLPGPKGSPGSI GLKGERGPPGGVGFPGSRGDI GPPGPPGVPIGPVGEKQAGFPGGPGSPG
LPGPKGEAGKVVPLPGPPGAAGLPGSPGFPGPQDRGFP GTPGRGPIGPEKGA VQPGI GFGPLPGPKGV
DGLPGEIGRPGSPGRPGFNGLPGNPGPQKQKGEPIGLPGLKQGPGLPGIPGTPGEKSGIGGPGVPEQ
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QSLPGLIGIPGRPGDKDQGLAGFP GSPGEKGEKGSAGTPGMPGSPGPRGSPGNI GHPGSPGLPGEKGD
GLPGLDGVPGVKEAGLPGTPGTPGAGQKGEPSDGI PGSAGEKGEQGV PGRGFP GFGSKGDKGSKGE
VGFPGLAGSPGIPGVKGEQFMGPPGPQGPGLPGTPGHVVEGPKGDRGPQGPGLPGHPGMPGPPGFP
INGPKGDKGNQGWPGAPGVPGKGD PFGQMPGIGGSPGITGSKGDMGLPGVPGFQKGLPGLQGVKGD
QGDQGVPGPKGLQGPPGPPGYDVIKGEPLPGPEGPPGLKGLQGPPGPKQQGVTSVGLPGPPGVPGF
DGAPGQKGETGPF GPPGPRGFP GPPGPDGLPGSMGPPGTPSVDHGFLVTRHSQTDDPLCPPGT KILYHG
YSLLYVQGNERAHGQDLGTAGSCLRKFS T M PFLFCNINNV CNFASRNDYSYWLSTPEPMPMSMAPISGDN
IRPFI SRCAVCEAPAMVMAVHSQTIQIPQCPNGWSSLWIGYSFVMHTSAGAE GSGQALASPGSCLEEFRS
APFIECHGRGTCNYYANAYSFWLATIERSEMFKKPTPSTLKAGELRTHVSRQCVMRRT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9105_b06.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_009931

ORF Size: 5007 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

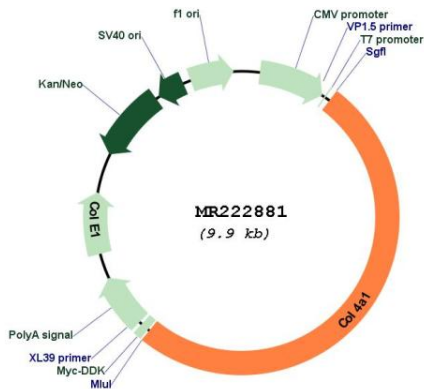
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_009931.2, NP_034061.2](#)
RefSeq Size: 6636 bp
RefSeq ORF: 5010 bp
Locus ID: 12826
UniProt ID: [P02463](#)
Cytogenetics: 8 5.53 cM
MW: 160.7 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]

Product images:



Circular map for MR222881