

Product datasheet for MC224806

Col4a1 (NM_009931) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Col4a1 (NM_009931) Mouse Untagged Clone
Tag: Tag Free
Symbol: Col4a1
Synonyms: Br; Bru; Col4; Col4a-1; Del(8)44; R; Raw; S; Svc
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224806 representing NM_009931
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGCCCCGGCTCAGCGTCTGGCTTCTGCTGCTCTTCGCCGCCCTTCTGCTCCACGAGGAGCGCAGCC
 GAGCAGCTGCGAAGGGCGATTGTGGTGGCTCTGGCTGTGAAAAATGTGACTGTCATGGCGTGAAGGGACA
 AAAGGGAGAAAGAGGCTTCCAGGGTTGCAAGGTGTCATTGGATTCCCGGGATGCAAGGACCTGAGGGG
 CCACATGGACCACCAGGACAAAAGGGTGTGCTGGAGAACCTGGACTTCCTGGCACAAAAGGGACGAGGG
 GACCCCTGGAGCAGCTGGCTACCTGGGAATCCCGGACTTCTGGTATTCTGGCCAAGATGGCCCTCC
 AGGTCCCCAGGTATCCAGGATGCAACGGTACAAAGGGAGAGAGGGCCGCTCGGTCTCTGGCTTG
 CCTGGATTGAGCGCAATCCTGGACCACCAGGGTTACCAGGAATGAAGGGAGATCCTGGTGAAATTCG
 GCCACGTTCCCGAACACTGCTGAAAGGGGAGAGAGGATTTCTGGTATCCCGGGATGCCGGGCTCACC
 AGGTTGCCAGGACTCCAGGGACCCGTGGTCTCCGGGATTTACTGGACCACCGGTCTCCAGGCCCT
 CCTGGACTCCTGGAGAAAAGGGCCAGATGGGCTCCAGCTTCAAGGACAAAAGGTGACAAGGGAGAGC
 AAGGGTTCAGCGTCCCGGGAGTTCTGGACAGGCACAAGTTAAGGAAAAAGGAGACTTTGCCCAAC
 AGGAGAAAAGGGTCAGAAAGGTGAACCTGGATTTCGGGAGTACCAGGATATGGAGAGAAAAGGTGAACCT
 GGCAAGCAAGGGCTCGGGGAAAACCTGGGAAAGACGGTAAAAAGGAGAAAAGGGGAGCCCGGGCATT
 CTGGCGATTCCGGGTACCCAGGTCTCCAGGCCGGCAGGGCCCGCAGGGAGAGAAGGGTGAAGCTGGACT
 TCCAGGCCCTTGGAACTGTGATAGGCACCATGCCTTTGGGAGAGAAAAGGAGATCGAGGCTACCCAGGA
 GCACCAGGGTTGAGAGGAGAGCCCGCCCTAAAGGTTTCCCTGGAACACCAGGCCAACAGGCCCTCCAG
 GTTCCCTACTCCAGGCCAGGCTGGTGTCCAGGCTTCCAGGTGAAAGGGGAGAAAAGGTGACCAGGG
 ATTTCCAGGCGTGTATTGCCAGGACCAAGTGAAGAGATGGAGCCCGGGCCCTCCCGCCCTCCCGGC
 CCCCTGGGCAGCCAGGCCACACAAATGGCATTGTGGAGTGTCAACCTGGACCACCGGGGACCAGGGCC
 CTCTGGGACTCCAGGACAGCCAGGTTTACAGGTGAAGTTGGACAGAAAAGGTGAGAAAAGGAGAGAGCTG
 CCTTGCTGTGACACAGAAGGACTTCGTGGCCCTCCAGGGCCACAGGGGCTCCGGGAGAGATTGTTTC
 CCTGGACAACCTGGGGCTAAAGGTGACCGAGGCTGCCCGGCAGAGATGGTCTTGAAGGATTGCCGGTCT



CACAAGGTTACCCAGGGCTTATAGGCCAGCCTGGAGCTAAGGGAGAGCCTGGAGAGATATTTTTGACAT
 GCGACTCAAAGGTGACAAAGGAGACCCAGGTTTTCCGGGACAGCCTGGCATGCCAGGAAGAGCAGGAACT
 CCCGGAAGAGATGGCCACCCAGGACTCCCTGGACCCAAAGGCTCTCCGGTTCAATAGGATTGAAAGGAG
 AGCGAGGTCTCCCGGAGGAGTTGGCTTCCCTGGTAGTCGTGGAGACATCGGCCCTCTGGACCCCCAGG
 AGTTGGCCCCATTGGTCTGTTGGTGAAAAAGGACAAGCAGGCTTTCCTGGAGGCCCTGGTCCCCAGGT
 CTTCCAGGCCAAAGGGTGAGGCAGGAAAGGTTGTCCACTCCCTGGCCCCCAGGAGCTGCAGGACTTC
 CAGGATCCCCTGGCTTCCAGGGCCAAAGGTGACCCAGGCTTCCAGGAACCCAGGACCTCCAGGACT
 CCCGGGAGAGAAAGGTGCTGTGGGCCAGCCAGGAATTGGATTTCCCTGGGCTTCCCTGGCCCCAAAGGTGT
 GATGGCTTGCCTGGAGAGATAGGACGGCCTGGGAGTCCAGGTCCGCTTGGATTTAACGGTTACCTGGCA
 ACCCAGGACCTCAAGGTCAAAGGGAGAACCTGGCATTGGGCTTCCAGGACTCAAAGGGCAACCAGGCC
 TCCAGGCATTCCCGGTACACCTGGAGAGAAGGGTAGCATCGGGGACCCGGCTTCCAGGAGAACAGGGG
 TTGACAGGCCCCAGGACTCCAGGGATCAGAGGTGACCCAGGGCTCCTGGAGTTCAAGGCCAGCAG
 GTCACCAGGGGTCCCAGGAATAGGGCCACCCGGAGCTATGGGCCCTCCCGAGGGCAAGGACCACCAGG
 GTCATCAGGTCCACCTGGAATTAAGGAGAGAAAGGGTCCCTGGATTCCCGGACTGGATATGCCTGGC
 CCCAAAGCGGATAAAGGCTCTCAAGGACTTCTGGCCTCACAGGACAGTCAGGCCTCCCTGGCCTTCTG
 GACAGCAGGGGACACCTGGAGTTCCAGGTTCCAGGTTCTAAAGGTGAAATGGGTGTATGGGAACCC
 GGGACAACCAGGCTCGCCAGGACCAGCAGGCACCCAGGGTTACCTGGAGAAAAAGGGGACCATGGCCTT
 CCGGGCTCCTCAGGACCCAGGGGCGACCCTGGCTTCAAAGGTGATAAAGGTGACGTTGGGCTTCTGGCA
 TGCCAGGATCCATGGAGCATGTGGACATGGGGAGCATGAAGGGACAGAAAGGAGACCAGGGAGAGAAAGG
 ACAAAATCGGACCCACTGGTGATAAAGGTTCCCGAGGAGACCCGGAACACCAGGAGTACCTGGGAAGGAT
 GGGCAGGCAGGGCATCCCGACAGCCAGGGCTAAAGGTGACCCAGGCCTTAGTGGGACACCAGGATCCC
 CTGGACTCCCTGGACCCAAAGGATCAGTTGGAGGAATGGCTTCCAGGTTCCCTGGAGAAAAAGGTGT
 GCCTGGCATCCCCTGGCTCACAGGTTGCTCCCTGGCTCACCTGGAGAGAAGGGAGCCAAAGGAGAAAGGG
 CAGTCAGGTCTACCTGGCATTGGGATTCGGGACGGCCTGGTGACAAGGGAGACCAGGGCCTTGGTGGCT
 TCCAGGCAGCCCGGTGAGAAGGGAGAGAAAGGCAGTGCCGGAACCCAGGGATGCCAGGTTCCCAGG
 CCCGAGAGTTCTCCGGGAACATCGGCCATCCAGGAAGCCAGGCCTGCCTGGAGAGAAAGGGGATAAA
 GGCCTCCAGGACTGGATGGCGTTCTGGTGTCAAAGGAGAAGCAGGTTCCCTGGGACTCCTGGCCCCA
 CAGGCCCAGCTGGCCAGAAGGGAGAGCCGGCAGCGATGGAATCCCGGGTTCGGCAGGAGAGAAGGGTGA
 ACAAGGTGTTCCAGGAAGAGGCTTCCCCGGCTTCCCTGGCTCAAAGGAGACAAAGGCTCCAAGGGTGA
 GTGGGTTTCCCTGGCCTAGCTGGAAGTCTGGAATTCCTGGAGTCAAAGGCGAGCAAGGGTTCATGGGTC
 CTCTGGCCCTCAAGGACAACCTGGCTTACCTGGCACTCCTGGTACCCTGTGGAGGGGCCAAAGGAGA
 CCGAGGACCTCAGGGTCAACCTGGCCTGCCAGGCATCCGGGACCTATGGGGCCGACAGGTTCCCAGGA
 ATCAATGGGCCAAAAGGTGACAAGGGAATCAAGGTTGGCCAGGAGCTCCGGGGTTCCAGGCCCTAAGG
 GAGACCCAGGATCCAAGGCATGCCGGCATTGGCGGCTCCTCAGGGATCACAGGTTCAAAGGGAGATAT
 GGGACTGCCCGGAGTTCCAGGATTTCAAGGTGAGAAAGGGCTTCTGGTCTGCAGGGAGTAAAGGAGAC
 CAGGGAGACCAAGGTGTACCCGGCCCTAAAGGTCTCAAGGTCCCCTGGGCCTCCAGGTTCCCTACGATG
 TCATCAAAGGAGAACCAGGGCTCCCTGGTCTGAGGGTCCCCCTGGTCTTAAAGGACTCCAGGGACCACC
 AGGTCCAAAAGGACAGCAAGGTGTGACAGGCTCAGTGGGCTTGCCTGGACCTCCAGGTGTCCCTGGGTT
 GATGGTCTCCTGGCCAGAAAGGAGAGACAGGACCCCTTTGGACCCTGGTCCAAGAGGGTTTCTGGCC
 CACCAGGCCCGATGGGCTGCCAGGATCCATGGGTCCCCAGGTACCCCATCTGTGGACCATGGCTTCT
 TGTGACCAGGCATAGTCAGACAACAGATGACCCACTGTGTCCCCAGGGACCAAAATTTTACCATGGA
 TACTCTGCTCTATGTCCAAGGCAACGAGCGTGCCACGGGAGGACTTGGGTACGGCTGGCAGCTGCC
 TGCGTAAGTTCAGCACCATGCCCTTCTCTTCTGCAACATCAACAACGTCTGCAACTTCGCTCCAGGAA
 CGACTACTTACTGGCTGTCCACGCCAGAGCCCATGCCATGTCCATGGCACCCATCTCTGGGACAAC
 ATCCGGCCCTTATTAGCAGGTGTGCGTTTGTGAAGCACCGCCATGGTATGGCGGTACACAGTCAGA
 CCATTAGATTCCGCAGTGCCCTAACGGTTGGTCTCACTGTGGATCGGCTATTCCTTCGTGATGCACAC
 CAGCGCTGGTGTGAAGTTCCGGCCAAGCCCTCGCATCCCCGGGTCTGTCTGGAAGAGTTTAGAAGC
 GCCCATTTCATCGAGTGCCACGGCAGAGGAACGTGCAATTAACGCAAAATGCTTACAGCTTTTGGCTCG
 CCACCATAGAGAGAAGCGAGATGTTCAAGAAGCCACGCCATCCACCTTGAAGGCAGGGGAGCTGCGAAC
 ACACGTACGGCTGCCAAGTGTGCATGAGAAGAACA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

Sgfl-Mlul

ACCN:

NM_009931

Insert Size:

5010 bp

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).

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

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]

Transcript Variant: This variant (1) represents the shorter transcript and encodes the functional protein.