

RIKEN Clone ID : IRAL043E16

Lot#: 7566_B4C7

Vector : pOTB7

Gene	COL6A3	
Accession No.	BC033174.1	3721 bp
	<i>CDS</i>	2942 bp

● **Plasmid DNA purification**

Date : 2024/03/07

Culture : LB (25 ug/ml Chloramphenicol) 5 ml -> at 37 deg C over night

Date : 2024/03/08

Purification : QIAGEN Miniprep kit -> dH₂O 100 ul

● **Digestion by restriction enzyme/Concentration calibration**

Date : 2024/03/08

DNA concentration (O.D.): 244 ng/ul

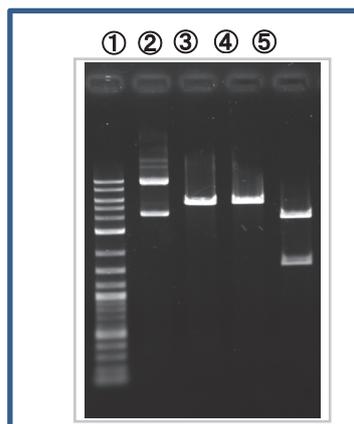
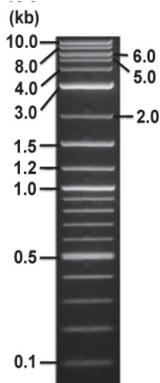
< Size of fragment expected from this clone >

DNA	0.4	ul
Enzyme (BamHI + BglII)	0.5 + 0.5	ul
Buffer H	1	ul
dH ₂ O	7.6	ul
Total	10	ul

BamHI	5.5	kb
BglII	5.5	kb
BamHI + BglII	1.6kb (Vector)	3.9

Electrophoresis : 1% agarose gel, 1x TAE Buffer

Marker : 2-Log DNA Ladder (NEB#N3200L)



①:Marker
②:uncut
③:BamHI
④:BglII
⑤:BamHI + BglII

● **Adjust plasmid DNA solution to 25 ng/ul**

Date : 2024/03/22

DNA (<u>244</u> ng/ul)	80	ul
10x TE	78	ul
dH ₂ O	623	ul
Total	781	ul

● **Confirmation of the insertion sequence**

Date : 2024/03/15

Primer A	pOTB7_F
Primer B	pOTB7_R
Primer C	-
List of Sequencing Primers	http://dna.brc.riken.jp/en/GNPclone3en.html

● **Shipping**

Conc. : 25 ng/ul, Volume : 40 ul

Conc. : ng/ul, Volume : ul

APPROVED BY :

<http://dna.brc.riken.jp/index.html>



BLAST Results

[Questions/comments](#)

Blast 2 sequences

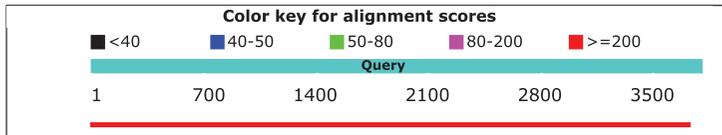
Job title: gb|BC033174.1|

RID [Z5B76R9G114](#) (Expires on 03-15 15:53 pm)

Query ID	BC033174.1	Subject ID	lcl Query_1863655
Description	Homo sapiens, Similar to collagen, type VI, alpha 3, clone IMAGE:4560529, mRNA, partial cds	Description	IRAL043E16z.seq
Molecule type	nucleic acid	Molecule type	dna
Query Length	3721	Subject Length	4004
		Program	BLASTN 2.15.0+

Graphic Summary

Distribution of the top 1 Blast Hits on 1 subject sequences



Dot Matrix View

Descriptions

Sequences producing significant alignments:

Description	Max Score	Total Score	Query Cover	E value	Per. Ident	Accession
None provided	6872	6872	100%	0.0	100.00%	Query_1863655

Alignments

Sequence ID: Query_1863655 Length: 4004 Number of Matches: 1
Range 1: 142 to 3862

Score	Expect	Identities	Gaps	Strand	Frame
6872 bits(3721)	0.0()	3721/3721(100%)	0/3721(0%)	Plus/Plus	
Features:					
CDS: Similar to colla	1	G F G R R G P P G A K G N K G G P G Q			
Query	1	GTGGCTTTGGCCGAAGGGGACCCCGGAGCTAAGGGCAACAAGGGGGTCTTGCCGAGC			60
Sbjct	142	GTGGCTTTGGCCGAAGGGGACCCCGGAGCTAAGGGCAACAAGGGGGTCTTGCCGAGC			201
CDS: Similar to colla	20	P G F E G E Q G T R G A Q G P A G P A G			
Query	61	CGGGCTTTGAGGGAGACAGGGGACCGAGGTTGACAGGGCCAGCTGGTCTGCTGGTC			120
Sbjct	202	CGGGCTTTGAGGGAGACAGGGGACCGAGGTTGACAGGGCCAGCTGGTCTGCTGGTC			261
CDS: Similar to colla	40	P P G L I G E Q G I S G P R G S G G A A			
Query	121	CTCCAGGGCTGATAGGAGAACAAAGGCATTTCTGGACCTCGGGGAAGCGGAGGTGCCGCTG			180
Sbjct	262	CTCCAGGGCTGATAGGAGAACAAAGGCATTTCTGGACCTCGGGGAAGCGGAGGTGCCGCTG			21
CDS: Similar to colla	60	G A P G E R G R T G P L G R K G E P G E			
Query	181	GTGCTCCTGGAGAACGAGGACGAGACCGGTCCACTGGGAAGAAAGGGTGAAGCCGAGAGC			240
Sbjct	22	GTGCTCCTGGAGAACGAGGACGAGACCGGTCCACTGGGAAGAAAGGGTGAAGCCGAGAGC			81
CDS: Similar to colla	80	P G P K G G I G N R G P R G E T G D D G			
Query	241	CAGGACCAAAAGGAGGAATCGGGAACCGGGGCCCTCGTGGGGAGACGGGAGATGACGGGA			00
Sbjct	82	CAGGACCAAAAGGAGGAATCGGGAACCGGGGCCCTCGTGGGGAGACGGGAGATGACGGGA			441
CDS: Similar to colla	100	R D G V G S E G R R G K K G E R G F P G			
Query	01	GAGACGGAGTTGGCAGTGAAGGACGAGAGGCAAAAAGGAGAAAGAGGATTCCTGGAT			60
Sbjct	442	GAGACGGAGTTGGCAGTGAAGGACGAGAGGCAAAAAGGAGAAAGAGGATTCCTGGAT			501
CDS: Similar to colla	120	Y P G P K G N P G E P G L N G T T G P K			
Query	61	ACCCAGGACCAAAAGGTAACCCAGGTGAACCTGGGCTAAATGGAACAACAGGACCCAAAG			420
Sbjct	502	ACCCAGGACCAAAAGGTAACCCAGGTGAACCTGGGCTAAATGGAACAACAGGACCCAAAG			561
CDS: Similar to colla	140	G I R G R R G N S G P P G I V G Q K G D			
Query	421	GCATCAGAGGCCGAAGGGGAAATTCGGGACCTCCAGGGATAGTTGGACAGAAGGGAGACC			480
Sbjct	562	GCATCAGAGGCCGAAGGGGAAATTCGGGACCTCCAGGGATAGTTGGACAGAAGGGAGACC			621
CDS: Similar to colla	160	P G Y P G P A G P K G N R G D S I D Q G			
Query	481	CTGGCTACCCAGGACCAAGCTGGTCCCAAGGGCAACAGGGGGCACTCCATCGATCAATGTG			540
Sbjct	622	CTGGCTACCCAGGACCAAGCTGGTCCCAAGGGCAACAGGGGGCACTCCATCGATCAATGTG			681
CDS: Similar to colla	180	A L I Q S I K D K C P C Y G P L E C P			
Query	541	CCCTCATCCAAGCATCAAAGATAAATGCCCTTGCTGTTACGGGCCCTGGAGTGCCCCG			600
Sbjct	682	CCCTCATCCAAGCATCAAAGATAAATGCCCTTGCTGTTACGGGCCCTGGAGTGCCCCG			741
CDS: Similar to colla	200	V F P T E L A F A L D T S E G V N Q D T			
Query	601	TCTTCCCAACAGAACTAGCCTTTGCTTTAGACACCTCTGAGGGAGTCAACCAAGACACTT			660
Sbjct	742	TCTTCCCAACAGAACTAGCCTTTGCTTTAGACACCTCTGAGGGAGTCAACCAAGACACTT			801
CDS: Similar to colla	220	F G R M R D V V L S I V N D L T I A E S			
Query	661	TCGGCCGGATGCGAGATGTGGTCTTGAGTATTGTGAATGACCTGACCATTTGCTGAGAGCA			720
Sbjct	802	TCGGCCGGATGCGAGATGTGGTCTTGAGTATTGTGAATGACCTGACCATTTGCTGAGAGCA			861
CDS: Similar to colla	240	N C P R G A R V A V V T Y N N E V T T E			
Query	721	ACTGCCCAACGGGGGGCCGGTGGCTGTGGTCACTACAACAACAGAGGTGACCAACGGAGA			780
Sbjct	862	ACTGCCCAACGGGGGGCCGGTGGCTGTGGTCACTACAACAACAGAGGTGACCAACGGAGA			921

CDS: Similar to colla Query 260 I R F A D S K R K S V L L D K I K N L Q 840
781 TCGGTTTGTGACTCCAAGAGGAAGTCGGTCTCCTGGACAAGATTAAGAAOCTTCAGG 840
Sbjct 922 TCGGTTTGTGACTCCAAGAGGAAGTCGGTCTCCTGGACAAGATTAAGAAOCTTCAGG 981
CDS: Similar to colla Query 280 V A L T S K Q Q S L E T A M S F V A R N 900
841 TGGCTCTGACATCAAACAGCAGAGTCTGGAGACTGCCATGTCGTTTGTGGCCAGGAACA 900
Sbjct 982 TGGCTCTGACATCAAACAGCAGAGTCTGGAGACTGCCATGTCGTTTGTGGCCAGGAACA 1041
CDS: Similar to colla Query 300 T F K R V R N G F L M R K V A V F F S N 960
901 CATTTAAGCGTGTGAGGAACGGATTCCTAATGAGGAAAGTGGCTGTTTCTTCAGCAACA 960
Sbjct 1042 CATTTAAGCGTGTGAGGAACGGATTCCTAATGAGGAAAGTGGCTGTTTCTTCAGCAACA 1101
CDS: Similar to colla Query 320 T P T R A S P Q L R E A V L K L S D A G 1020
961 CACCACAAAGAGATCCCAACAGCTCAGAGAGGCTGTCTCAAGCTCAGATGGGGGA 1020
Sbjct 1102 CACCACAAAGAGATCCCAACAGCTCAGAGAGGCTGTCTCAAGCTCAGATGGGGGA 1161
CDS: Similar to colla Query 340 I T P L F L T R Q E D R Q L I N A L Q I 1080
1021 TCACCOCCTTGTTCCTTACAAGGCGAGGAAGCCGGCAGCTCATCAACGCTTCGAGATCA 1080
Sbjct 1162 TCACCOCCTTGTTCCTTACAAGGCGAGGAAGCCGGCAGCTCATCAACGCTTCGAGATCA 1221
CDS: Similar to colla Query 360 N N T A V G H A L V L P A G R D L T D F 1140
1081 ATAACACAGCAGTGGGGCATGGCCTGTCTGCCTGCAGGGAGAGACCTCACAGACTTCC 1140
Sbjct 1222 ATAACACAGCAGTGGGGCATGGCCTGTCTGCCTGCAGGGAGAGACCTCACAGACTTCC 1281
CDS: Similar to colla Query 380 L E N V L T C H V C L D I C N I D P S G 1200
1141 TGGAGAATGTCTCAGGTGTATGTTGCTTGGACATCTGCAACATCGACCCATCCTGTG 1200
Sbjct 1282 TGGAGAATGTCTCAGGTGTATGTTGCTTGGACATCTGCAACATCGACCCATCCTGTG 1341
CDS: Similar to colla Query 400 G F G S W R P S F R D R R A A G S D V G 1260
1201 GATTTGGCAGTGGAGGCTTCTTCAAGGACAGGAGCGGAGGAGCGATGGGACA 1260
Sbjct 1342 GATTTGGCAGTGGAGGCTTCTTCAAGGACAGGAGCGGAGGAGCGATGGGACA 1401
CDS: Similar to colla Query 420 I D M A F I L D S A E I T T L F O F N E 1320
1261 TCGACATGGCTTTCATCTTAGACAGCGCTGAGACCACCCTGTCCAGTTCATGAGA 1320
Sbjct 1402 TCGACATGGCTTTCATCTTAGACAGCGCTGAGACCACCCTGTCCAGTTCATGAGA 1461
CDS: Similar to colla Query 440 M K K Y I A Y L V R Q L D M S P D P K A 1380
1321 TGAAGAAATACATAGCGTACCTGGTCCAGCAACTGGACATGAGCCAGATCCCAAGGCT 1380
Sbjct 1462 TGAAGAAATACATAGCGTACCTGGTCCAGCAACTGGACATGAGCCAGATCCCAAGGCT 1521
CDS: Similar to colla Query 460 S Q H F A R V A V V Q H A P S E S D N 1440
1381 CCCAGCACTTCGCCAGAGTGGCAGTTGTGCAGCAGCGCCCTCGAGTCCGTGGCAATG 1440
Sbjct 1522 CCCAGCACTTCGCCAGAGTGGCAGTTGTGCAGCAGCGCCCTCGAGTCCGTGGCAATG 1581
CDS: Similar to colla Query 480 A S M P P V K V E F S L T D Y G S K E K 1500
1441 CCAGCATGCCACCTGTGAAGGTGGAATTCCTCCTGACTGACTATGGCTCCAAGGAGAAG 1500
Sbjct 1582 CCAGCATGCCACCTGTGAAGGTGGAATTCCTCCTGACTGACTATGGCTCCAAGGAGAAG 1641
CDS: Similar to colla Query 500 L V D F L S R G M T Q L Q G T R A L L G S 1560
1501 TGGTGGACTTCTCAGCAGGGGAATGACACAGTTGCAAGGAAACCCAGGCTTAGCAGTG 1560
Sbjct 1642 TGGTGGACTTCTCAGCAGGGGAATGACACAGTTGCAAGGAAACCCAGGCTTAGCAGTG 1701
CDS: Similar to colla Query 520 A I E Y A T I E N V F E S A P N P R D L K 1620
1561 CCATTGAATACACCATAGAGAATGCTTTGAAAGTGCCCAAAACCCAGGGACCTGAAAA 1620
Sbjct 1702 CCATTGAATACACCATAGAGAATGCTTTGAAAGTGCCCAAAACCCAGGGACCTGAAAA 1761
CDS: Similar to colla Query 540 I V V L M L T G E V P E Q Q L E A Q R 1680
1621 TGTGGTCTGATGCTGACGGGCGAGGTGCCGGAGCAGCAGCTGGAGGAGGCCAGAGAG 1680
Sbjct 1762 TGTGGTCTGATGCTGACGGGCGAGGTGCCGGAGCAGCAGCTGGAGGAGGCCAGAGAG 1821
CDS: Similar to colla Query 560 V I L Q A K C K G Y F F V V L G I G R K 1740
1681 TCATCCTGCAGGCCAAATGCAAGGGCTACTTCTCCTGGTCTGGGCTTGGCAGGAAG 1740
Sbjct 1822 TCATCCTGCAGGCCAAATGCAAGGGCTACTTCTCCTGGTCTGGGCTTGGCAGGAAG 1881
CDS: Similar to colla Query 580 V N I K E V Y T F A S E P N D V F F K L 1800
1741 TGAACATCAAGGAGGTATACACCTTCGCCAGTGAGCCAAACGACGTCTCTCAAAATAG 1800
Sbjct 1882 TGAACATCAAGGAGGTATACACCTTCGCCAGTGAGCCAAACGACGTCTCTCAAAATAG 1941
CDS: Similar to colla Query 600 V D K S T E L N E E P L M R F G R L L P 1860
1801 TGGACAAGTCCACCGAGCTCAACGAGGAGCCTTGTATGCGCTTCGGGAGGCTGTGCCAT 1860
Sbjct 1942 TGGACAAGTCCACCGAGCTCAACGAGGAGCCTTGTATGCGCTTCGGGAGGCTGTGCCAT 2001
CDS: Similar to colla Query 620 S F V S S E N A F Y L S P D I R K Q C D 1920
1861 CCTTCCTCAGCAGTGAATAAGTCTTTACTTGTCCCAGATATCAGGAAACAGTGTGATT 1920
Sbjct 2002 CCTTCCTCAGCAGTGAATAAGTCTTTACTTGTCCCAGATATCAGGAAACAGTGTGATT 2061
CDS: Similar to colla Query 640 W F O G G D O P T K N L V K F E G H K A Q V N 1980
1921 GGTTCCAAGGGGACCAACCCACAAAGAACCTTGTGAAGTTGGTCACAAACAAGTAAATG 1980
Sbjct 2062 GGTTCCAAGGGGACCAACCCACAAAGAACCTTGTGAAGTTGGTCACAAACAAGTAAATG 2121
CDS: Similar to colla Query 660 V P N N V T S S P T S N P V T T T K P V 2040
1981 TTCCGAATAACGTTACTTCAAGTCTACATCCAACCCAGTGACGACAAAGCCGGTGA 2040

Sbjct 2122 TTCCGAATAACGTTACTTCAAGTCTACATCCAACCCAGTGACGACAAAGCCGGTGA 2181
CDS: Similar to colla Query 680 T T T K P V T T T T K P V T T T T T K P V 2100
2041 CTACGACGAAGCCGGTGACCACACAAAGCCCTGTAACCACCAACAAAGCCCTGTGA 2100
Sbjct 2182 CTACGACGAAGCCGGTGACCACACAAAGCCCTGTAACCACCAACAAAGCCCTGTGA 2241
CDS: Similar to colla Query 700 T I T I N O P S V K P A A A K P A P A K P 2160
2101 CTATTATAAATCAGCCATCTGTGAAGCCAGCCGCTGCAAAAGCCGGCCGTGGAAACCTG 2160
Sbjct 2242 CTATTATAAATCAGCCATCTGTGAAGCCAGCCGCTGCAAAAGCCGGCCGTGGAAACCTG 2301
CDS: Similar to colla Query 720 V A A K P V A T K M A T V R P P V A V K 2220
2161 TGGCTGCCAAGCCCTGTGGCCACAAAGATGGCCACTGTAGACCCCAAGTGGCCGGTGAAGC 2220
Sbjct 2302 TGGCTGCCAAGCCCTGTGGCCACAAAGATGGCCACTGTAGACCCCAAGTGGCCGGTGAAGC 2361
CDS: Similar to colla Query 740 P A T A A K P V A A K P A A V R P P A A 2280
2221 CAGCAACGGCAGGAAGCCCTGTAGCAGAAAGCCAGCAGCTGTAAAGCCGCCGTGCTGTG 2280
Sbjct 2362 CAGCAACGGCAGGAAGCCCTGTAGCAGAAAGCCAGCAGCTGTAAAGCCGCCGTGCTGTG 2421
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2281 CTGCTGCAAAACAGTGGCCACCAAGCCGTGAGGTCCTAGGCCACAGGACCCCAAGCCAG 2340
Sbjct 2422 CTGCTGCAAAACAGTGGCCACCAAGCCGTGAGGTCCTAGGCCACAGGACCCCAAGCCAG 2481
CDS: Similar to colla Query 780 A A T K P A T T K P M V K M S R E V Q V 2400
2341 CTGCCACCAAGCCAGCCACTAAGCCATGGTTAAGATGCCCGTGAAGTCCAGGTGTG 2400
Sbjct 2482 CTGCCACCAAGCCAGCCACTAAGCCATGGTTAAGATGCCCGTGAAGTCCAGGTGTG 2541
CDS: Similar to colla Query 800 F E I T E N S A K L H W E R A E E P P G P 2460
2401 TTGAGATTAACAGAGAACAGCCCAACTCCACTGGGAGAGGGCTGAGCCGCCCGCTCTT 2460
Sbjct 2542 TTGAGATTAACAGAGAACAGCCCAACTCCACTGGGAGAGGGCTGAGCCGCCCGCTCTT 2601
CDS: Similar to colla Query 820 Y F Y D L T V T S A H D Q S L V L K Q N 2520
2461 ATTTTATGACCTCACCGTCACTCAGCCATGATCAGTCCCTGGTCTGAAGCAGAACC 2520
Sbjct 2602 ATTTTATGACCTCACCGTCACTCAGCCATGATCAGTCCCTGGTCTGAAGCAGAACC 2661
CDS: Similar to colla Query 840 L T V T D R V I G G L L A G Q T Y H V A 2580
2521 TCACGGTCACGGACCGGTCATGGAGCCCTGCTCGCTGGCCAGACATACCATGTGGCTG 2580
Sbjct 2662 TCACGGTCACGGACCGGTCATGGAGCCCTGCTCGCTGGCCAGACATACCATGTGGCTG 2721
CDS: Similar to colla Query 860 V V C Y L R S Q V R A T Y H G S F S T K 2640
2581 TGGTCTGCTACCTGAGGTCTCAGGTGAGGACCACTACCAGGAAGTTTCAATACAAAGA 2640
Sbjct 2722 TGGTCTGCTACCTGAGGTCTCAGGTGAGGACCACTACCAGGAAGTTTCAATACAAAGA 2781
CDS: Similar to colla Query 880 K S Q P P P P Q P A R S A S S A T I N L 2700
2641 AATCTCAGCCCCCACTCCACAGCCAGGAAGTCAAGTTCAGTCAACCATCAATCTAA 2700
Sbjct 2782 AATCTCAGCCCCCACTCCACAGCCAGGAAGTCAAGTTCAGTCAACCATCAATCTAA 2841
CDS: Similar to colla Query 900 M V S T E P L A L T E D I C K L P K A D 2760
2701 TGGTGGACAGAACCATTTGGCTCTCACTGAAACAGATATGCAAGTTGCCGAAAGGAGC 2760
Sbjct 2842 TGGTGGACAGAACCATTTGGCTCTCACTGAAACAGATATGCAAGTTGCCGAAAGGAGC 2901
CDS: Similar to colla Query 920 E G T C R D F I L K W Y Y D P N T K S C 2820
2761 AAGGAACCTTCAGGGATTCATATTAATAAGTACTATGATCCAAACACCAAAAGGCTGTG 2820
Sbjct 2902 AAGGAACCTTCAGGGATTCATATTAATAAGTACTATGATCCAAACACCAAAAGGCTGTG 2961
CDS: Similar to colla Query 940 A R F W Y G G C G G N E N K F G S Q K E 2880
2821 CAAGATCTGGTATGGAGTTGTGGTGGAAAGCAAAACAAATTTGGATCAGAGAAAGAA 2880
Sbjct 2962 CAAGATCTGGTATGGAGTTGTGGTGGAAAGCAAAACAAATTTGGATCAGAGAAAGAA 3021
CDS: Similar to colla Query 960 C E K V C A P V L A K P G V I S V M G T 2940
2881 GTGAAAAGGTTTGGCTCCTGCTCGCCAAACCCGGAGTCATCAGTGTGATGGGAACCT 2940
Sbjct 3022 GTGAAAAGGTTTGGCTCCTGCTCGCCAAACCCGGAGTCATCAGTGTGATGGGAACCT 3081
Query 2941 AAGCGTGGTGGCCAAACATACCTCTTGAAGAAGGAAGGTCAGCCATCGCCAACT 3000
Sbjct 3082 AAGCGTGGTGGCCAAACATACCTCTTGAAGAAGGAAGGTCAGCCATCGCCAACT 3141
Query 3121 TCTGTGGACCCCTGCTCTGTCTCCAGGCGAGTCTCTCGAATACTTGAATGTGTGTA 3180
Sbjct 3262 TCTGTGGACCCCTGCTCTGTCTCCAGGCGAGTCTCTCGAATACTTGAATGTGTGTA 3321
Query 3181 ACAGTATGCCACTGCTGGTGTATGTGAACATTCCTATCAATCCAATTCCTCTGGAG 3240
Sbjct 3322 ACAGTATGCCACTGCTGGTGTATGTGAACATTCCTATCAATCCAATTCCTCTGGAG 3381
Query 3241 TTTTCATGTTATGCTGTTGCAGGCAATGTAAGTCTAGAAAAATGCAAAATGTCACGG 3300
Sbjct 3382 TTTTCATGTTATGCTGTTGCAGGCAATGTAAGTCTAGAAAAATGCAAAATGTCACGG 3441
Query 3301 CTACTCTATATACTTTTGGTGGTTCATTTTTTCCCTTTTAGTAAAGCATGACTTGA 3360

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Sbjct      3442 CTACTCTATATACTTTTGGTTGGTTCATTTTTCCCTTTAGTTAAGCATGACTTTAG 3501
Query      3361 ATGGGAAGCCTGTGTATCGTGGGAGAAACAAGAGACCAACTTTTTTCATCCCTGCCCCCAA 3420
Sbjct      3502 ATGGGAAGCCTGTGTATCGTGGGAGAAACAAGAGACCAACTTTTTTCATCCCTGCCCCCAA 3561
Query      3421 TTTCCAGACTAGATTTCAAGCTAATTTCTTTTTCTGAAGCCTCTAACAAATGATCTAG 3480
Sbjct      3562 TTTCCAGACTAGATTTCAAGCTAATTTCTTTTTCTGAAGCCTCTAACAAATGATCTAG 3621
Query      3481 TTCAGAAGGAAGCAAAATCCCTTAATCTATGTGCACCGTTGGGACCAATGCCTTAATTA 3540
Sbjct      3622 TTCAGAAGGAAGCAAAATCCCTTAATCTATGTGCACCGTTGGGACCAATGCCTTAATTA 3681
Query      3541 AGAAATTAATAAAGTTGTAATAGAGAAATTTTTGGCATTCCCTCTAATGTTGTGTTTT 3600
Sbjct      3682 AGAAATTAATAAAGTTGTAATAGAGAAATTTTTGGCATTCCCTCTAATGTTGTGTTTT 3741
Query      3601 tttttttGTGTGCTGGAGGGAGGGGATTAATTTAATTTTAAATGTTAGGAAATTT 3660
Sbjct      3742 TTTTTTTGTGTGCTGGAGGGAGGGGATTAATTTAATTTTAAATGTTAGGAAATTT 3801
Query      3661 ATACAAAGAAACTTTTTTAATAAGTATATTGAAAGTTAAACaaaaaaaaaaaaaaaaa 3720
Sbjct      3802 ATACAAAGAAACTTTTTTAATAAGTATATTGAAAGTTAAACAAAAAAAAAAAAAAAAA 3861
Query      3721 a 3721
Sbjct      3862 A 3862

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BLAST Results

[Questions/comments](#)

Blast 2 sequences

Job title: NM_057167:Homo sapiens collagen type VI alpha...

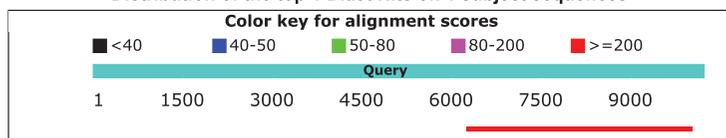
RID [YMW6UEDW114](#) (Expires on 03-09 08:58 am)

Query ID [NM_057167.4](#)
Description Homo sapiens collagen type VI alpha 3 chain (COL6A3), transcript variant 5, mRNA
Molecule type nucleic acid
Query Length 9914

Subject ID [BC033174.1](#)
Description Homo sapiens, Similar to collagen, type VI, alpha 3, clone IMAGE:4560529, mRNA, partial cds
[See details](#)
Molecule type nucleic acid
Subject Length 3721
Program BLASTN 2.15.0+

Graphic Summary

Distribution of the top 1 Blast Hits on 1 subject sequences



Dot Matrix View

Descriptions

Sequences producing significant alignments:

Description	Max Score	Total Score	Query Cover	E value	Per. Ident	Accession
Homo sapiens, Similar to collagen, type VI, alpha 3, clone IMAGE:4560529, mRNA, partial cds	6824	6824	37%	0.0	99.97%	BC033174.1

Alignments

Homo sapiens, Similar to collagen, type VI, alpha 3, clone IMAGE:4560529, mRNA, partial cds
 Sequence ID: **BC033174.1** Length: 3721 Number of Matches: 1
 Range 1: 1 to 3698

Score	Expect	Identities	Gaps	Strand	Frame
6824 bits(3695)	0.0()	3697/3698(99%)	0/3698(0%)	Plus/Plus	
Features:					
CDS:collagen alpha-3	1992	G G F G R R G P P G A K G N K G G P G Q			
Query	6217	GTGGCTTTGGCCGAAGGGACCCCGGAGCTAAGGGCAACAAGGGGGCTCTGGCCAGC			6276
Sbjct	1	GTGGCTTTGGCCGAAGGGACCCCGGAGCTAAGGGCAACAAGGGGGCTCTGGCCAGC			60
CDS:Similar to colla	1	G F G R R G P P G A K G N K G G P G Q			
CDS:collagen alpha-3	2012	P G F E G E Q G T R G A Q G P A G P A G			
Query	6277	CGGGCTTTGAGGGAGAGCAGGGACCGAGAGTGCACAGGGCCAGCTGGTCTGCTGGTC			6336
Sbjct	61	CGGGCTTTGAGGGAGAGCAGGGACCGAGAGTGCACAGGGCCAGCTGGTCTGCTGGTC			120
CDS:Similar to colla	20	P G F E G E Q G T R G A Q G P A G P A G			
CDS:collagen alpha-3	2032	P P G L I G E Q G I S G P R G S G G A A			
Query	6337	CTCCAGGGCTGATAGGAGAACAAAGGCATTTCTGGACCTCGGGAAAGGGAGGTGCCCTG			6396
Sbjct	121	CTCCAGGGCTGATAGGAGAACAAAGGCATTTCTGGACCTCGGGAAAGGGAGGTGCCCTG			180
CDS:Similar to colla	40	P P G L I G E Q G I S G P R G S G G A A			
CDS:collagen alpha-3	2052	G A P G E R G R T G P L G R K G E P G E			
Query	6397	GTGCTCCTGGAGAACGAGGCAGAACCGGTCCACTGGGAAGAAAGGGTGAAGCCGGAGAGC			6456
Sbjct	181	GTGCTCCTGGAGAACGAGGCAGAACCGGTCCACTGGGAAGAAAGGGTGAAGCCGGAGAGC			240
CDS:Similar to colla	60	G A P G E R G R T G P L G R K G E P G E			
CDS:collagen alpha-3	2072	P G P K G G I G N R G P R G E T G D D G			
Query	6457	CAGGACCAAAAGGAGGAATCGGAAACCGGGCCCTCGTGGGAGACGGGAGATGACGGGA			6516
Sbjct	241	CAGGACCAAAAGGAGGAATCGGAAACCGGGCCCTCGTGGGAGACGGGAGATGACGGGA			300
CDS:Similar to colla	80	P G P K G G I G N R G P R G E T G D D G			
CDS:collagen alpha-3	2092	R D G V G S E G R R G K K G E R G F P G			
Query	6517	GAGACGGAGTTGGCAGTGAAGGACGACAGGGCAAAAAGGAGAAAGAGGATTCCTGGAT			6576
Sbjct	301	GAGACGGAGTTGGCAGTGAAGGACGACAGGGCAAAAAGGAGAAAGAGGATTCCTGGAT			360
CDS:Similar to colla	100	R D G V G S E G R R G K K G E R G F P G			
CDS:collagen alpha-3	2112	Y P G P K G N P G E P G L N G T T G P K			
Query	6577	ACCCAGGACCAAAAGGTAACCCAGGTGAACCTGGGCTAAATGGAAACACAGGACCCAAAG			6636
Sbjct	361	ACCCAGGACCAAAAGGTAACCCAGGTGAACCTGGGCTAAATGGAAACACAGGACCCAAAG			420
CDS:Similar to colla	120	Y P G P K G N P G E P G L N G T T G P K			
CDS:collagen alpha-3	2132	G I R G R R G N S G P P G I V G Q K G D			
Query	6637	GCATCAGAGGCCGAAGGGGAAATTCGGGACCTCCAGGGAAGTGGACAGAAAGGAGAAC			6696
Sbjct	421	GCATCAGAGGCCGAAGGGGAAATTCGGGACCTCCAGGGAAGTGGACAGAAAGGAGAAC			480
CDS:Similar to colla	140	G I R G R R G N S G P P G I V G Q K G D			
CDS:collagen alpha-3	2152	P G Y P G P A G P K G N R G D S I D Q C			
Query	6697	CTGGCTACCCAGGACCGTGGTCCCAAGGGCAACAGGGGCGACTCCATCGATCAATGTG			6756
Sbjct	481	CTGGCTACCCAGGACCGTGGTCCCAAGGGCAACAGGGGCGACTCCATCGATCAATGTG			540
CDS:Similar to colla	160	P G Y P G P A G P K G N R G D S I D Q C			
CDS:collagen alpha-3	2172	A L I Q S I K D K C P C Y G P L E C P			
Query	6757	CCCTCATCCAAAGCATCAAAGATAAATGCCCTTGCTGTTACGGGCCCTGGAGTCCCCG			6816
Sbjct	541	CCCTCATCCAAAGCATCAAAGATAAATGCCCTTGCTGTTACGGGCCCTGGAGTCCCCG			600
CDS:Similar to colla	180	A L I Q S I K D K C P C Y G P L E C P			

CDS:collagen alpha-3 Query 2192 6817 V F P T E L A F A L D T S E G V N Q D T T C T C C C A A C A G A A C T A G C C T T T G C T T A G A C A C C T C T G A G G G A G T C A A C C A A G A C A C T T 6876

Sbjct 601 T C T C C C A A C A G A A C T A G C C T T T G C T T A G A C A C C T C T G A G G G A G T C A A C C A A G A C A C T T 660

CDS:Similar to colla 200 V F P T E L A F A L D T S E G V N Q D T

CDS:collagen alpha-3 Query 2212 6877 F G R M R D V V L S I V N D L T I A E S T T G G C C G G A T G C G A G A T G T G G T C T T G A G T A T T G T G A A T G A C C T G A C C A T T G C T G A G A G C A 6936

Sbjct 661 T G G C C G G A T G C G A G A T G T G G T C T T G A G T A T T G T G A A T G A C C T G A C C A T T G C T G A G A G C A 720

CDS:Similar to colla 220 F G R M R D V V L S I V N D L T I A E S T

CDS:collagen alpha-3 Query 2232 6937 N C P R G A R V A V V T Y N N E V T T E A C T G C C C A C G G G G G C C G G G T G G C T G T G G T C A C C T A C A A C A C A G G G T G A C C A C G G G A 6996

Sbjct 721 A C T G C C C A C G G G G G C C G G G T G G C T G T G G T C A C C T A C A A C A C A G G G T G A C C A C G G G A 780

CDS:Similar to colla 240 N C P R G A R V A V V T Y N N E V T T E

CDS:collagen alpha-3 Query 2252 6997 I R F A D S K R K S V L L D K I K N N L Q T C G G T T G C T G A C C A A G A G G A A G T C G G C C C T G G A C A A G A T T A A G A A C C T T C A G G 7056

Sbjct 781 T C G G T T G C T G A C C A A G A G G A A G T C G G C C C T G G A C A A G A T T A A G A A C C T T C A G G 840

CDS:Similar to colla 260 I R F A D S K R K S V L L D K I K N N L Q

CDS:collagen alpha-3 Query 2272 7057 V A L T S K Q Q S L E T A M S F V A R N T G G C T G A C A T C C A A A C A G C A G A G T C G G A G A C T G C C A T G C G T T G T G C C A G G A A C A 7116

Sbjct 841 T G G C T G A C A T C C A A A C A G C A G A G T C G G A G A C T G C C A T G C G T T G T G C C A G G A A C A 900

CDS:Similar to colla 280 V A L T S K Q Q S L E T A M S F V A R N

CDS:collagen alpha-3 Query 2292 7117 T F K R V R N G F L M R K V A V F F S N C A T T A A G C G T G A G G A A C G G A T T C C T A A T G A G G A A A G T G G C T G T T T C T C A G C A A C A 7176

Sbjct 901 C A T T A A G C G T G A G G A A C G G A T T C C T A A T G A G G A A A G T G G C T G T T T C T C A G C A A C A 960

CDS:Similar to colla 300 T F K R V R N G F L M R K V A V F F S N

CDS:collagen alpha-3 Query 2312 7177 T P T R A S P Q L R E A V L K L S D A G C A C C C A A G A G A T C C C C A G C T C A G A G A G G T G T G C T A A G C T C T C A G A T G C G G G G A 7236

Sbjct 961 C A C C C A A A G A G A T C C C C A G C T C A G A G A G G T G T G C T A A G C T C T C A G A T G C G G G G A 1020

CDS:Similar to colla 320 T P T R A S P Q L R E A V L K L S D A G

CDS:collagen alpha-3 Query 2332 7237 I T P L F L T R Q E D R Q L I N A L Q I T C A C C C C T T G T C C T A C A A G G C A G G A A C C G G C A G C T C A T C A A C G C T T T G C A G A T C A 7296

Sbjct 1021 T C A C C C C T T G T C C T A C A A G G C A G G A A C C G G C A G C T C A T C A A C G C T T T G C A G A T C A 1080

CDS:Similar to colla 340 I T P L F L T R Q E D R Q L I N A L Q I

CDS:collagen alpha-3 Query 2352 7297 N N T A V G H A L V L P A G R D L T D F A T A A C A C A G C A G T G G G C A T G G C T T G C T G C C T G C A G G A G A G A C C T C A C A G A C T T C C 7356

Sbjct 1081 A T A A C A C A G C A G T G G G C A T G G C T T G C T G C C T G C A G G A G A G A C C T C A C A G A C T T C C 1140

CDS:Similar to colla 360 N N T A V G H A L V L P A G R D L T D F

CDS:collagen alpha-3 Query 2372 7357 L E N V L T C H V C L D I C N I D P S C T G G A A T G T C C A C G T G C A T G T T G C T T G G A C A T C G A A C A T C G A C C C A C T C C T G T G 7416

Sbjct 1141 T G G A A T G T C C A C G T G C A T G T T G C T T G G A C A T C G A A C A T C G A C C C A C T C C T G T G 1200

CDS:Similar to colla 380 L E N V L T C H V C L D I C N I D P S C

CDS:collagen alpha-3 Query 2392 7417 G F G S W R P S F R D R R A A G S D V D G A T T T G G C A G T T G G A G C C T T C C T T C A G G A C A G G A G C G G C A G G A G C A G T T G G A C A 7476

Sbjct 1201 G A T T T G G C A G T T G G A G C C T T C C T T C A G G A C A G G A G C G G C A G G A G C A G T T G G A C A 1260

CDS:Similar to colla 400 G F G S W R P S F R D R R A A G S D V D

CDS:collagen alpha-3 Query 2412 7477 I D M A F I L D S A E T T T L F O F N E T G A C A T G G C T T C A T C T T A G A C A G G C T G A G A C C A C C C T G T T C C A G T T C A A T G A G A 7536

Sbjct 1261 T G A C A T G G C T T C A T C T T A G A C A G G C T G A G A C C A C C C T G T T C C A G T T C A A T G A G A 1320

CDS:Similar to colla 420 I D M A F I L D S A E T T T L F O F N E

CDS:collagen alpha-3 Query 2432 7537 M K K Y I A Y L V R Q L D M S P D P K A T G A A G A A G T A C A T A G C G T A C C T G G T C A G A C A C T G G A C A T G A G C C C A G A T C C C A A G G C C T 7596

Sbjct 1321 T G A A G A A G T A C A T A G C G T A C C T G G T C A G A C A C T G G A C A T G A G C C C A G A T C C C A A G G C C T 1380

CDS:Similar to colla 440 M K K Y I A Y L V R Q L D M S P D P K A

CDS:collagen alpha-3 Query 2452 7597 S Q H F A R V A V V Q H A P S E S V D N C C C A G C A C T T C G C A G A G T G G C A G T T G T G C A G C A C G C C C T C T G A G T C C G T G G A C A A T G 7656

Sbjct 1381 C C C A G C A C T T C G C A G A G T G G C A G T T G T G C A G C A C G C C C T C T G A G T C C G T G G A C A A T G 1440

CDS:Similar to colla 460 S Q H F A R V A V V Q H A P S E S V D N

CDS:collagen alpha-3 Query 2472 7657 A S M P P V K V E F S L T D Y G S K E K C C A G C A T G C C A C C T G T G A A G G T G G A A T T C C C T G A C T G A C T A T G G C T C C A A G G A G A A G C 7716

Sbjct 1441 C C A G C A T G C C A C C T G T G A A G G T G G A A T T C C C T G A C T G A C T A T G G C T C C A A G G A G A A G C 1500

CDS:Similar to colla 480 A S M P P V K V E F S L T D Y G S K E K

CDS:collagen alpha-3 Query 2492 7717 L V D F L S R G M T Q L Q G T R A L G S T G G T G A C T T C C T A G C A G G G A A T G A C A C A T T G C A G G G A A C C A G G G C C T T A G C A G T G 7776

Sbjct 1501 T G G T G A C T T C C T A G C A G G G A A T G A C A C A T T G C A G G G A A C C A G G G C C T T A G C A G T G 1560

CDS:Similar to colla 500 L V D F L S R G M T Q L Q G T R A L G S

CDS:collagen alpha-3 Query 2512 7777 A I E Y T I E N V F E S A P N P R D L G C C A T T G A A T A C A C C A T A G A G A A T G C T T G A A A G T G C C C A A A C C C A G G G A C C T G A A A A 7836

Sbjct 1561 C C A T T G A A T A C A C C A T A G A G A A T G C T T G A A A G T G C C C A A A C C C A G G G A C C T G A A A A 1620

CDS:Similar to colla 520 A I E Y T I E N V F E S A P N P R D L G

CDS:collagen alpha-3 Query 2532 7837 I V V L M L T G E V P E Q Q L E E A O R T T G T G G T C C T G A T G C T G A C G G G C A G G T G C C G G A G C A G C A G C T G G A G A G G C C C A G A G A G 7896

Sbjct 1621 T T G T G G T C C T G A T G C T G A C G G G C A G G T G C C G G A G C A G C A G C T G G A G A G G C C C A G A G A G 1680

CDS:Similar to colla 540 I V V L M L T G E V P E Q Q L E E A O R

CDS:collagen alpha-3 Query 2552 7897 V I L Q A K C K G Y F F V V L G I G R K T C A T C C T G C A G G C C A A T G C A A G G G C T A C T T C T G T G G T C C T G G C A T T G G C A G G A A G G 7956

Sbjct 1681 T C A T C C T G C A G G C C A A T G C A A G G G C T A C T T C T G T G G T C C T G G C A T T G G C A G G A A G G 1740

CDS:Similar to colla 560 V I L Q A K C K G Y F F V V L G I G R K

CDS:collagen alpha-3 Query 2572 7957 V N I K E V Y T F A S E P N D V F F K L T G A A C A T C A A G G A G T A C A C C T T C G C C A G T G A G C C A A C A G C T C T T C C A A I T A G 8016

Sbjct 1741 T G A A C A T C A A G G A G T A C A C C T T C G C C A G T G A G C C A A C A G C T C T T C C A A I T A G 1800

CDS:Similar to colla 580 V N I K E V Y T F A S E P N D V F F K L

CDS:collagen alpha-3 Query 2592 8017 V D K S T E L N E E P L M R F G R L L P T G G A A A G T C C A C C G A C T C A A C G A G G A G C C T T G A T G C G C T C G G G A G G C T G T G C C A T 8076

Sbjct 1801 T G G A A G T C C A C C G A C T C A A C G A G G A G C C T T G A T G C G C T C G G G A G G C T G T G C C A T 1860

CDS:Similar to colla 600 V D K S T E L N E E P L M R F G R L L P

CDS:collagen alpha-3 Query 2612 8077 S F V S S E N A F Y L S P D I R K Q C D C C T C G T C A G C A G T G A A A T G C T T T T A C T T G C C C A G A T A C A G A A C A G T G T G A T T 8136

Sbjct 1861 C C T C G T C A G C A G T G A A A T G C T T T T A C T T G C C C A G A T A C A G A A C A G T G T G A T T 1920

CDS:Similar to colla 620 S F V S S E N A F Y L S P D I R K Q C D

CDS:collagen alpha-3 Query 2632 8137 W F O G D Q P T K N L V K F G H K Q V N G G T C C A A G G G A C C A C C C A A A G A A C C T T G T G A A G T T G G T C A C A A C A A G T A A A T G 8196

Sbjct 1921 G G T C C A A G G G A C C A C C C A A A G A A C C T T G T G A A G T T G G T C A C A A C A A G T A A A T G 1980

CDS:Similar to colla 640 W F O G D Q P T K N L V K F G H K Q V N

CDS:collagen alpha-3 Query 2652 8197 V P N N V T S S P T S N P V T T K K P V T T C C G A A T A A C G T T A C T C A A G T C C T A C A T C C A A C C C A G C A C A C A A G C C G T G A 8256

Sbjct 1981 T T C C G A A T A A C G T T A C T C A A G T C C T A C A T C C A A C C C A G C A C A C A A A G C C G T G A 2040

CDS:Similar to colla 660 V P N N V T S S P T S N P V T T K K P V

CDS:collagen alpha-3 Query 2672 8257 T T T K P V T T T T K P V T T T K P V C T A C G A G A A G C C G G T G A C C A C A C A A A A G C C T G A A C C A C C A C A A A G C C T G T G A 8316

Sbjct 2041 C T A C G A G A A G C C G G T G A C C A C A C A A A A G C C T G A A C C A C C A C A A A G C C T G T G A 2100

CDS:Similar to colla 680 T T T K P V T T T T K P V

CDS:collagen alpha-3 Query 2692 8317 T I I N Q P S V K P A A K P A P A K P C T A T T A T A A T C A G C A T C T G T G A A G C C A C C C G T G C A A A G C C C C C C T G C G A A A C C T G 8376

Sbjct 2101 C T A T T A T A A T C A G C A T C T G T G A A G C C A C C C G T G C A A A G C C C C C C T G C G A A A C C T G 2160

CDS:Similar to colla 700 T I I N Q P S V K P A A K P A P A K P

CDS:collagen alpha-3 Query 2712 8377 V A A K P V A T K M A T V R P P V A A G T G G C T G C C A A G C C T G T G G C C A A A G A T G G C C A C T T T A G A C C C C A G T G G C V G K 8436

Sbjct 2161 T G G C T G C C A A G C C T G T G G C C A A A G A T G G C C A C T T T A G A C C C C A G T G G C V G K 2220

CDS:Similar to colla 720 V A A K P V A T K M A T V R P P V A A K

CDS:collagen alpha-3 Query 2732 8437 P A T A A K P V A A K P A A V R P P A A C A G C A A C C A G C A A G C C T G T A G C A G A A A G C C A G C T G T A A G A C C C C C G C T G T G 8496

Sbjct 2221 C A G C A A C C A G C A A G C C T G T A G C A G A A A G C C A G C T G T A A G A C C C C C G C T G T G 2280

CDS:Similar to colla 740 P A T A A K P V A A K P A A V R P P A A

CDS:collagen alpha-3 Query 2752 8497 A A A K P V A T K P E V P Q A A K P C T G C T G C A A A C C A G T G G C C A C A A G C C T G A G G T C C T A G G C C A C A G C A G C C A A A C C A G 8556

Sbjct 2281 C T G C T G C A A A C C A G T G G C C A C A A G C C T G A G G T C C T A G G C C A C A G C A G C C A A A C C A G 2340

CDS:Similar to colla 760 A A A K P V A T K P E V P Q A A K P

CDS:collagen alpha-3 Query 2772 8557 A A T K P A T T K P M V K M S R E V Q V C T G C C A A G C C A C C A C C A C T A A G C C A T G T T A A G A T G T C C C G T A A G T C C A G G T G 8616

Sbjct 2341 C T G C C A A G C C A C C A C C A C T A A G C C A T G T T A A G A T G T C C C G T A A G T C C A G G T G 2400

CDS:Similar to colla 780 A A T K P A T T K P M V K M S R E V Q V

CDS:collagen alpha-3 Query 2792 8617 F E I T E N S A K L H W E R A E P P G P T T G A G A T A A C A G A A A C C G C C A A C T C C A C T G G A G A G G C T G A G C C C C G G T C C T T 8676

Sbjct 2401 T T G A G A T A A C A G A A A C C G C C A A C T C C A C T G G A G A G G C T G A G C C C C G G T C C T T 2460

CDS:Similar to colla 800 F E I T E N S A K L H W E R A E P P G P

CDS:collagen alpha-3 Query 2812 8677 Y F Y D L T V T S A H D Q S L V L K Q N A T T T T A G A C C T A C C C T A C C C T A G C C C A T G A T C A G T C C C T G G T C T G A A G C A G A A C C 8736

Sbjct 2461 A T T T T A T G A C C T A C C C T A C C C A T G A T C A G T C C C T G G T C T G A A G C A G A A C C 2520

CDS:Similar to colla 820 Y F Y D L T V T S A H D Q S L V L K Q N

CDS:collagen alpha-3 Query 2832 8737 L T V T D R V I G G L L A G Q T Y H V A T C A C G G T C A C G G C C G C T A T T G A G G C C T G C T C C T G G G A G A C A T A C C A T G T G C T G 8796

Sbjct 2521 T C A C G G T C A C G G A C C G G C A T T G A G G C C T G C T C C T G G G A G A C A T A C C A T G T G C T G 2580

CDS:Similar to colla 840 L T V T D R V I G G L L A G Q T Y H V A

CDS:collagen alpha-3 Query 2852 8797 V V C Y L R S Q V R A T Y H G S F S T A K T T G G T C T A C C T A G G T C T A G G T C A G A G C C A C C T A C C A G G A A G T T C A G T A C A A A G A 8856

Sbjct 2581 T G G T C T G C T A C C T A G G T C T A G G T C A G A G C C A C C T A C C A G G A A G T T C A G T A C A A A G A 2640

CDS:Similar to colla 860 V V C Y L R S Q V R A T Y H G S F S T A K

CDS:collagen alpha-3 Query 2872 K S O P P P P Q P A R S A S S S T I N L

Query	8857	AATCTCAGCCCCACCTCCACAGCCAGCAAGGTCAGCTTCTAGTTCAACCATCAATCTAA	8916
Sbjct	2641	AATCTCAGCCCCACCTCCACAGCCAGCAAGGTCAGCTTCTAGTTCAACCATCAATCTAA	2700
CDS:Similar to colla	880	K S Q P P P P Q P A R S A S S S T I N L	
CDS:collagen alpha-3	2892	M V S T E P L A L T E T D I C K L P K D	
Query	8917	TGGTGAGCACAGAACCATGGCTCTCACTGAAACAGATATGCAAGTGGCCGAAAGACG	8976
Sbjct	2701	TGGTGAGCACAGAACCATGGCTCTCACTGAAACAGATATGCAAGTGGCCGAAAGACG	2760
CDS:Similar to colla	900	M V S T E P L A L T E T D I C K L P K D	
CDS:collagen alpha-3	2912	E G T C R D F I L K W Y Y D P N T K S C	
Query	8977	AAGGAACCTGCAGGGATTTCATATAAAATGGTACTATGATCCAAACCCAAAGGCTGG	9036
Sbjct	2761	AAGGAACCTGCAGGGATTTCATATAAAATGGTACTATGATCCAAACCCAAAGGCTGG	2820
CDS:Similar to colla	920	E G T C R D F I L K W Y Y D P N T K S C	
CDS:collagen alpha-3	2932	A R F W Y G G C G G N E N K F G S Q K E	
Query	9037	CAAGATCTGGTATGGAGTTGGTGGAAACGAAACAAATTTGGATCACAGAAAGAAAT	9096
Sbjct	2821	CAAGATCTGGTATGGAGTTGGTGGAAACGAAACAAATTTGGATCACAGAAAGAAAT	2880
CDS:Similar to colla	940	A R F W Y G G C G G N E N K F G S Q K E	
CDS:collagen alpha-3	2952	C E K V C A P V L A K P G V I S V M G T	
Query	9097	GTGAAAAGGTTTGGCTCCTGTGCTCGCCAAACCCGGAGTCATCAGTGTGATGGGAACCT	9156
Sbjct	2881	GTGAAAAGGTTTGGCTCCTGTGCTCGCCAAACCCGGAGTCATCAGTGTGATGGGAACCT	2940
CDS:Similar to colla	960	C E K V C A P V L A K P G V I S V M G T	
Query	9157	AAGCGTGGTGGCCAAACATCATATACCTCTTGAAGAAGAGGAGTCAGCCATCGCCAACT	9216
Sbjct	2941	AAGCGTGGTGGCCAAACATCATATACCTCTTGAAGAAGAGGAGTCAGCCATCGCCAACT	3000
Query	9217	TGTCCTGTAGAAGCTCCGGGTGTAGATTCCCTGCACTGTATCATTTATGCTTTGATT	9276
Sbjct	3001	TGTCCTGTAGAAGCTCCGGGTGTAGATTCCCTGCACTGTATCATTTATGCTTTGATT	3060
Query	9277	TACACTCGAACTCGGGAGGGAACATCCTGCTGCATGACCTATCAGTATGGTCTAATGTG	9336
Sbjct	3061	TACACTCGAACTCGGGAGGGAACATCCTGCTGCATGACCTATCAGTATGGTCTAATGTG	3120
Query	9337	TCTGTGGACCCCTCGCTCTCTGTCTCCAGGCAGTTCTCTCGAATACTTTGAATGTTGTGTA	9396
Sbjct	3121	TCTGTGGACCCCTCGCTCTCTGTCTCCAGGCAGTTCTCTCGAATACTTTGAATGTTGTGTA	3180
Query	9397	ACAGTTAGCCACTGCTGGTGTATGTGAACATCCATCAATCCAAATCCCTCTGGAG	9456
Sbjct	3181	ACAGTTAGCCACTGCTGGTGTATGTGAACATCCATCAATCCAAATCCCTCTGGAG	3240
Query	9457	TTTCATGTTATGCCTGTGCAGGCAAAATGAAAGCTAGAAAAATATGCAAAATGTCACGG	9516
Sbjct	3241	TTTCATGTTATGCCTGTGCAGGCAAAATGAAAGCTAGAAAAATATGCAAAATGTCACGG	3300
Query	9517	CTACTCTATACTTTTGGCTTGGTTCATTTTTTTCCCTTTTAGTTAAGCATGACTTTAG	9576
Sbjct	3301	CTACTCTATACTTTTGGCTTGGTTCATTTTTTTCCCTTTTAGTTAAGCATGACTTTAG	3360
Query	9577	ATGGGAAGCCTGTGTATCGTGGGAAAAAAGACCAACTTTTTTCATTCCCTGCCCCAA	9636
Sbjct	3361	ATGGGAAGCCTGTGTATCGTGGGAAAAAAGACCAACTTTTTTCATTCCCTGCCCCAA	3420
Query	9637	TTTCCAGACTAGATTTCAAGCTAAATTTCTTTTCTGAAGCCTTAACAAATGATCTAG	9696
Sbjct	3421	TTTCCAGACTAGATTTCAAGCTAAATTTCTTTTCTGAAGCCTTAACAAATGATCTAG	3480
Query	9697	TTGAGAAGGAAGCAAAATCCCTTAATCTATGTGCACCGTTGGGACCAATGCCTTAATTA	9756
Sbjct	3481	TTGAGAAGGAAGCAAAATCCCTTAATCTATGTGCACCGTTGGGACCAATGCCTTAATTA	3540
Query	9757	AGAAATTAATAAAGTTGTAATAGAGAAATTTTTGGCATTCCTCTAATGTTGTGTTTT	9816
Sbjct	3541	AGAAATTAATAAAGTTGTAATAGAGAAATTTTTGGCATTCCTCTAATGTTGTGTTTT	3600
Query	9817	TTTTTTGTGTGCTGGAGGGAGGGGATTAATTTAATTTAAATGTTAGGAAATTT	9876
Sbjct	3601	TTTTTTGTGTGCTGGAGGGAGGGGATTAATTTAATTTAAATGTTAGGAAATTT	3660
Query	9877	ATACAAAGAAACTTTTTAATAAAGTATATTGAAAGTTT	9914
Sbjct	3661	ATACAAAGAAACTTTTTAATAAAGTATATTGAAAGTTT	3698



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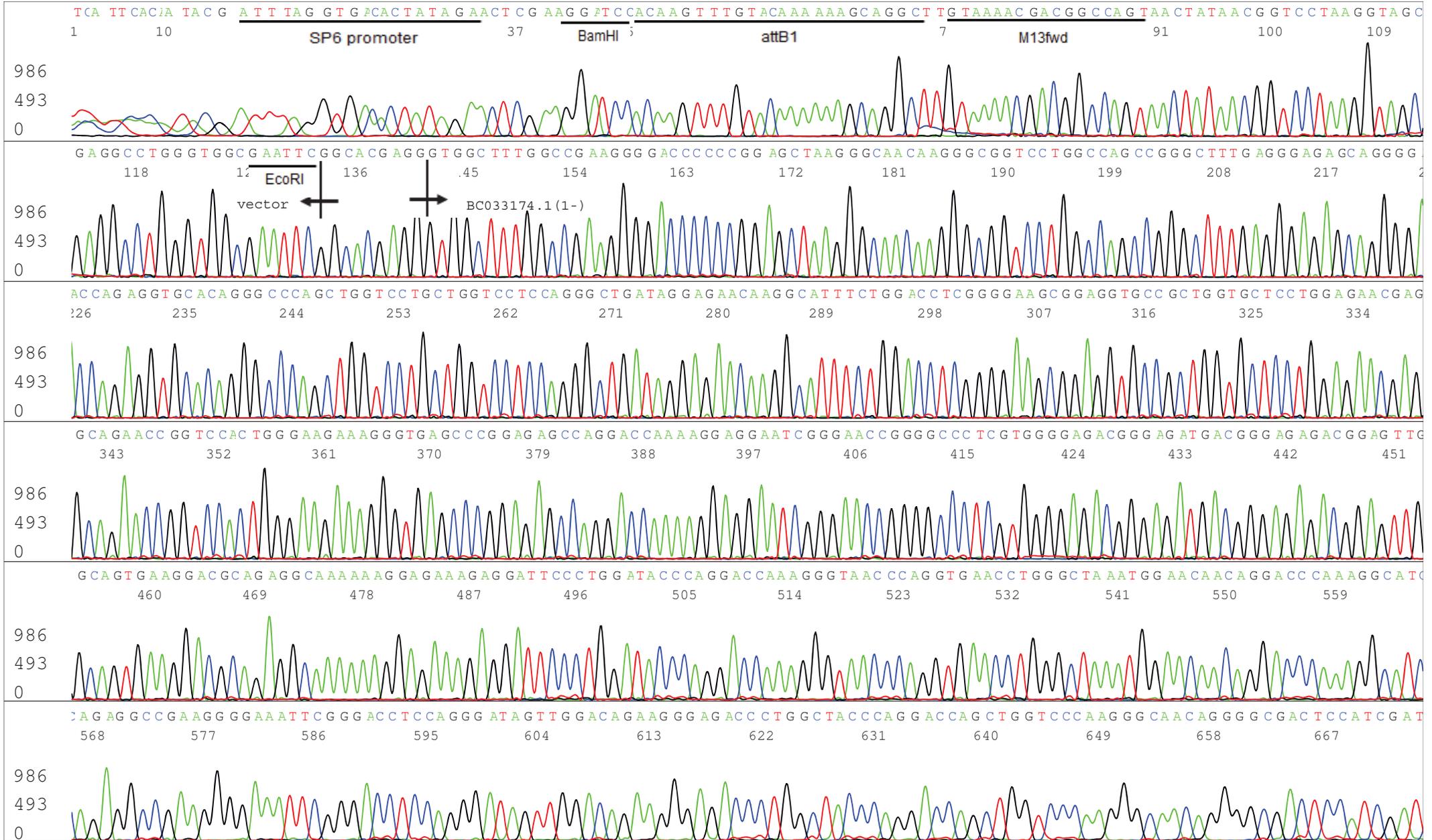
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S/N G:259 A:473 T:225 C:324
KB.bcp
KB 1.4.1.8 Cap:3

Primer A: pOTB7-F
5' AACGCGGCTACAATTAATACATAACC 3'



S/N G:281 A:551 T:331 C:403
KB.bcp
KB 1.4.1.8 Cap:6

Primer B: pOTB7-R

5' GTACTGCAGCCGATTCATTAATGC 3'

7566_IRAL043E16_B4C7_pOTB7_R_B03_06_ABI24
7566_IRAL043E16_B4C7_pOTB7_R
KB_3500_POP7_BDTv3.mob
Pts 1532 to 13134 Pk1 Loc:1509
Version 6.0 HiSQV Bases: 851

Inst Model/Name 3500/3500 Instrument
Mar 08,2024 03:14PM, JST
Mar 08,2024 03:42PM, JST
Spacing:11.57 Pts/Panel1350
Plate Name: 20240308_mix

