NRCD Human Full-Length cDNA Clone

Gene Engineering Division
RIKEN BioResource Research Center

RIKEN Clone ID : RBdS083E16

Lot# : 6608_B3Jr

Vector : pGCAP10

Gene	COL16A1	
RefSeq_mRNA	NM_001856.4	5418 bp

● Plasmid DNA purification

Date : 2023/10/26 Culture : LB (100 ug/ml Ampicillin) 5 ml -> at 37 deg C O/N

Date : 2023/10/27 Purification : QIAGEN Miniprep kit -> dH_2O 100 ul

● Digestion by restriction enzyme/Concentrarion calibration

Date : 2023/10/27

DNA concentration (O.D.): 196 ng/ul

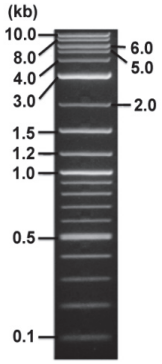
DNA	0.5 ul
Enzyme (BamHI)	1 ul
Buffer H	1 ul
dH_2O	7.5 ul
Total	10 ul

< Size of fragment expected from this clone >

BamHI 3.1kb (vector), 2.4, 1.5, 1.4, 0.3, <0.1 kb (unsure)

Erectrophoresis : 1% agarose gel, 1x TAE Buffer

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





①:Marker
②:uncut
③:BamHI

● Confirmation of the insertion sequence

Date : 2023/11/06

Primer A	pGCAP-F
Primer B	pGCAP-R
Primer C	Poly(A) region
List of Sequencing Primers	http://dna.brc.riken.jp/en/NRCDhum2en.html

● Adjust plasmid DNA solution to 25 ng/ul

Date : 2023/12/12

DNA (196 ng/ul)	78 ul
10x TE	61 ul
dH_2O	472 ul
Total	612 ul

● Shipping

☑ Conc. : 25 ng/μl, Volume : 40 μl

☐ Conc. : ___ ng/μl, Volume : ___ μl

APPROVED BY : 検 '23.12.12 笹沼

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

BLAST Results

Questions/comments

Blast 2 sequences

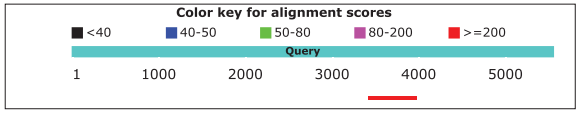
Job title: ref|NM_001856.4|

RID M3RVC7F7114 (Expires on 11-02 13:17 pm)

Query ID	NM_001856.4	**Subject ID**	lcl|Query_71987
Description	Homo sapiens collagen type XVI alpha 1 chain (COL16A1), mRNA	**Description**	None See details
Molecule type	nucleic acid	**Molecule type**	dna
Query Length	5418	**Subject Length**	713
		Program	BLASTN 2.14.1+

Graphic Summary

Distribution of the top 1 Blast Hits on 1 subject sequences



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'23.11.06
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Partial CDS

Dot Matrix View

Descriptions

Sequences producing significant alignments:

Description	Max Score	Total Score	Query Cover	E value	Per. Ident	Accession
None provided	987	987	9%	0.0	99.81%	Query_71987

Alignments

Sequence ID: Query_71987 Length: 713 Number of Matches: 1
Range 1: 177 to 713

Score	Expect	Identities	Gaps	Strand	Frame
987 bits(534)	0.0()	536/537(99%)	0/537(0%)	Plus/Plus	

Features:

```
CDS:collagen alpha-1  1066  G L Q G E R G L T G L T G D K G E P G P
Query                 3411  GGCCTTCAAGGAGAGCGAGGTCTCACGGGCCTGACTGGAGACAAGGGGGAGCCGGGTCCT  3470
                            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct                  177  GGCCTTCAAGGAGAGCGAGGTCTCACGGGCCTGACTGGAGACAAGGGGGAGCCGGGTCCT   236

CDS:collagen alpha-1  1086  P G Q P G Y P G A T G P P G L P G I K G
Query                 3471  CCAGGGCAACCAGGTTACCCAGGTGCCACGGGCCCCCCAGGACTGCCTGGCATCAAGGGG  3530
                            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct                  237  CCAGGGCAACCAGGTTACCCAGGTGCCACGGGCCCCCCAGGACTGCCTGGCATCAAGGGG   296

CDS:collagen alpha-1  1106  E R G Y T G S A G E K G E P G P P G S E
Query                 3531  GAGCGTGGCTACACCGGGTCAGCGGGAGAGAAAGGAGAGCCGGGCCCCCCAGGATCTGAA  3590
                            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct                  297  GAGCGTGGCTACACCGGGTCAGCGGGAGAGAAAGGAGAGCCGGGCCCCCCAGGATCTGAA   356

CDS:collagen alpha-1  1126  G L P G P P G P A G P R G E R G P Q G N
Query                 3591  GGCCTCCCAGGCCCCCCAGGCCCAGCGGGTCCCAGAGGAGAGCGAGGACCCCAAGGTAAC  3650
                            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct                  357  GGCCTCCCAGGCCCCCCAGGCCCAGCGGGTCCCAGAGGAGAGCGAGGACCCCAAGGTAAC   416

CDS:collagen alpha-1  1146  S G E K G D Q G F Q G Q P G F P G P P G
Query                 3651  TCCGGTGAGAAGGGCGACCAGGGATTTCAAGGCCAGCCAGGCTTTCCGGGCCCACCGGGT  3710
                            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct                  417  TCCGGTGAGAAGGGCGACCAGGGATTTCAAGGCCAGCCAGGCTTTCCGGGCCCACCGGGT   476

CDS:collagen alpha-1  1166  P P G F P G K V G S P G P P G P Q A E K
Query                 3711  CCCCCTGGATTCCCAGGCAAAGTTGGATCACCTGGCCCACCTGGCCCTCAAGCAGAGAAG  3770
                            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct                  477  CCCCCTGGATTCCCAGGCAAAGTTGGATCACCTGGCCCACCTGGCCCTCAAGCAGAGAAG   536

CDS:collagen alpha-1  1186  G S E G I R G P S G L P G S P G P P G P
Query                 3771  GGCAGCGAAGGGATTCGAGGCCCATCAGGCCTGCCTGGCTCCCCTGGGCCACCGGGACCT  3830
                            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct                  537  GGCAGCGAAGGGATTCGAGGCCCATCAGGCCTGCCTGGCTCCCCTGGGCCACCGGGACCT   596

CDS:collagen alpha-1  1206  P G I Q G P A G L D G L D G K D G K P G
Query                 3831  CCTGGGATTCAGGGCCCCGGCCGGTCTGGATGGTTTGGATGGGAAGGACGGCAAGCCTGGC  3890
                            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct                  597  CCTGGGATTCAGGGCCCCGGCCGGTCTGGATGGTTTGGATGGGAAGGATGGCAAGCCTGGC   656

CDS:collagen alpha-1  1226  L R G D P G P A G P P G L M G P P G F
Query                 3891  TTGAGGGGGGACCCTGGTCCTGCTGGCCCCCCTGGACTCATGGGACCACCGGGCTTT  3947
                            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct                  657  TTGAGGGGGGACCCTGGTCCTGCTGGCCCCCCTGGACTCATGGGACCACCGGGCTTT   713
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Applied Biosystems

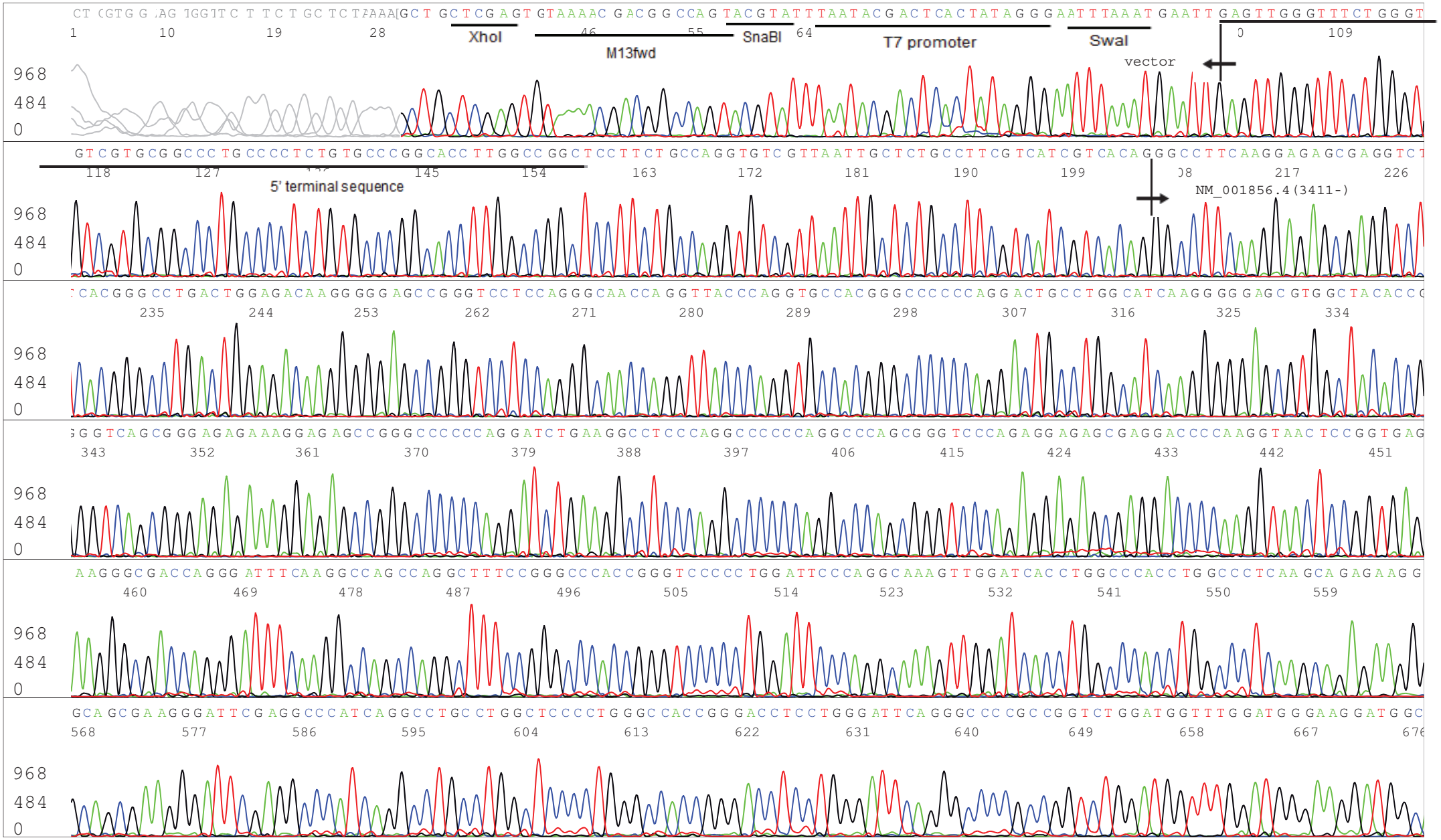
S/N G:59 A:77 T:48 C:106
KB.bcp
KB 1.4.1.8 Cap:4

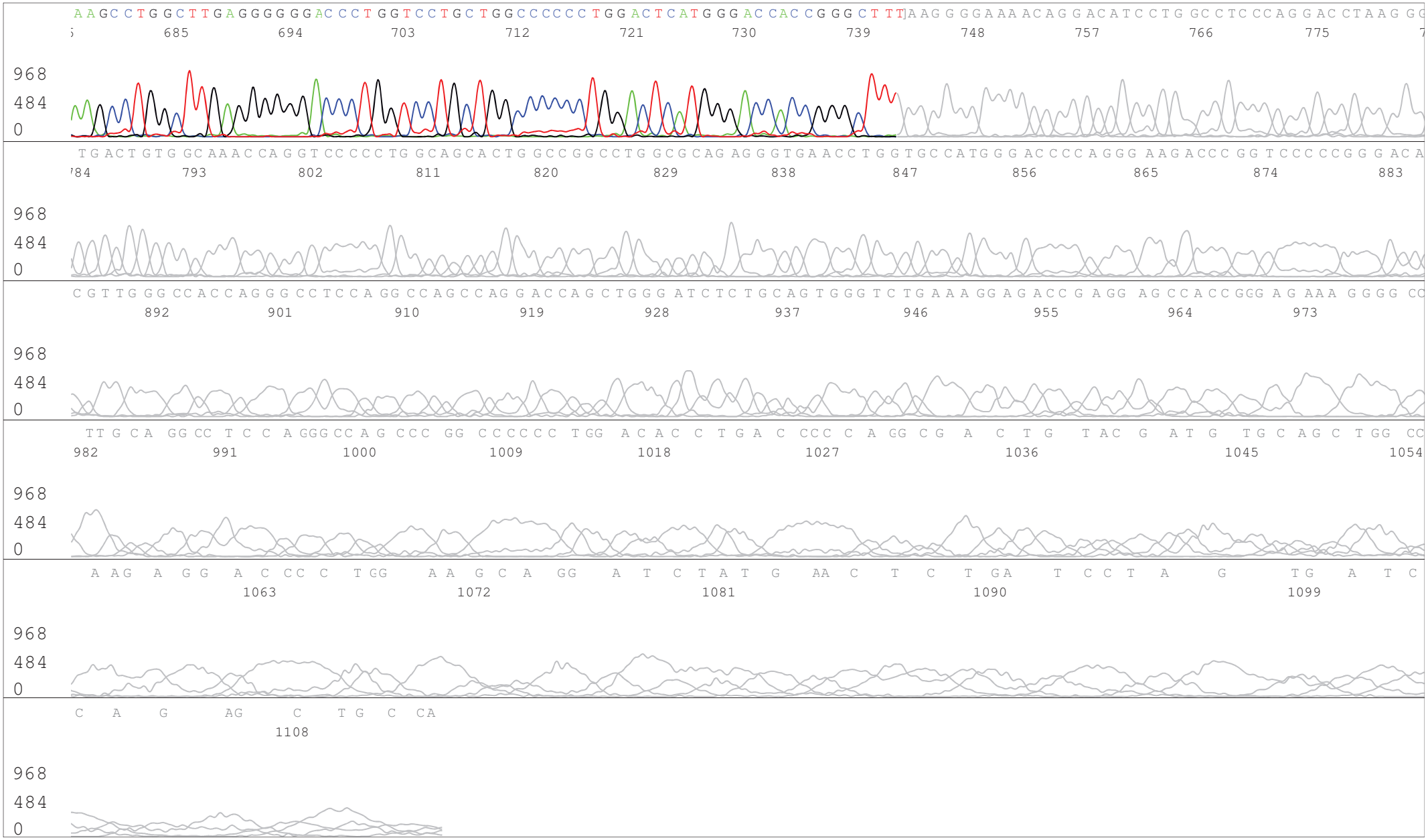
Primer A : pGCAP-F
5' CTCAGTGGATGTTGCCTTTAC 3'

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6608_RBdS083E16_B3Jr_pGCAP_F
KB_3500_POP7_BDTv3.mob
Pts 1411 to 13354 Pk1 Loc:1388
Version 6.0 HiSQV Bases: 877

Gray line indicates quality value (QV) < 40.

Inst Model/Name 3500/3500 Instrument
Oct 31,2023 10:09AM, JST
Oct 31,2023 10:41AM, JST
Spacing:11.99 Pts/Panel1350
Plate Name: 20231031_GNP




685 694 703 712 721 730 739 748 757 766 775
968 484 0
793 802 811 820 829 838 847 856 865 874 883
892 901 910 919 928 937 946 955 964 973
982 991 1000 1009 1018 1027 1036 1045 1054
1063 1072 1081 1090 1099
1108

Applied Biosystems

S/N G:13 A:16 T:18 C:19
KB.bcp
KB 1.4.1.8 Cap:5

Primer B : pGCAP-R
5' GCATTCTAGTTGTGGTTTGTCC 3'

6608_RBdS083E16_B3Jr_pGCAP_R_E01_05_ABI08
6608_RBdS083E16_B3Jr_pGCAP_R
KB_3500_POP7_BDTv3.mob
Pts 1415 to 13000 Pk1 Loc:1392
Version 6.0 HiSQV Bases: 67

Inst Model/Name 3500/3500 Instrument
Oct 31,2023 10:09AM, JST
Oct 31,2023 10:41AM, JST
Spacing:13.25 Pts/Panel1350
Plate Name: 20231031_GNP

