NRCD Human Full-Length cDNA Clone

Gene Engineering Division
RIKEN BioResource Research Center

RIKEN Clone ID : ARi69H10

Lot# : 7675_B6Fb

Vector : pGCAP10

Gene	KIAA0776	
RefSeq_mRNA	NM_015323.5	4226 bp

● Plasmid DNA purification

Date : 2026/06/15 Culture : LB (100 ug/ml Ampicillin) 5 ml -> at 37 deg C O/N

Date : 2026/06/16 Purification : QIAGEN Miniprep kit -> dH_2O 100 ul

● Digestion by restriction enzyme/Concentrarion calibration

Date : 2026/06/16

DNA concentration (O.D.): 331 ng/ul

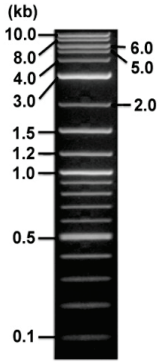
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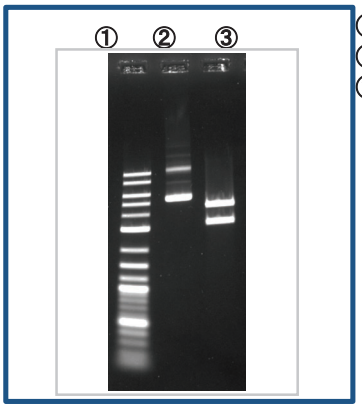
DNA	0.3	ul
Enzyme (BamHI)	1	ul
Buffer H	1	ul
dH_2O	7.7	ul
Total	10	ul

BamHI 3.1kb (vector), 4.4 kb

Erectrophoresis : 1% agarose gel, 1x TAE Buffer

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





①:Marker
②:uncut
③:BamHI

● Confirmation of the sequence

Date : 2026/06/18

full sequence	ARi69H10hts01.seq

● Adjust plasmid DNA solution to 25 ng/ul

Date : 2026/06/23

DNA (331 ng/ul)	86	ul
10x TE	114	ul
dH_2O	939	ul
Total	1,139	ul

● Shipping

☑ Conc. : 25 ng/μl, Volume : 40 μl

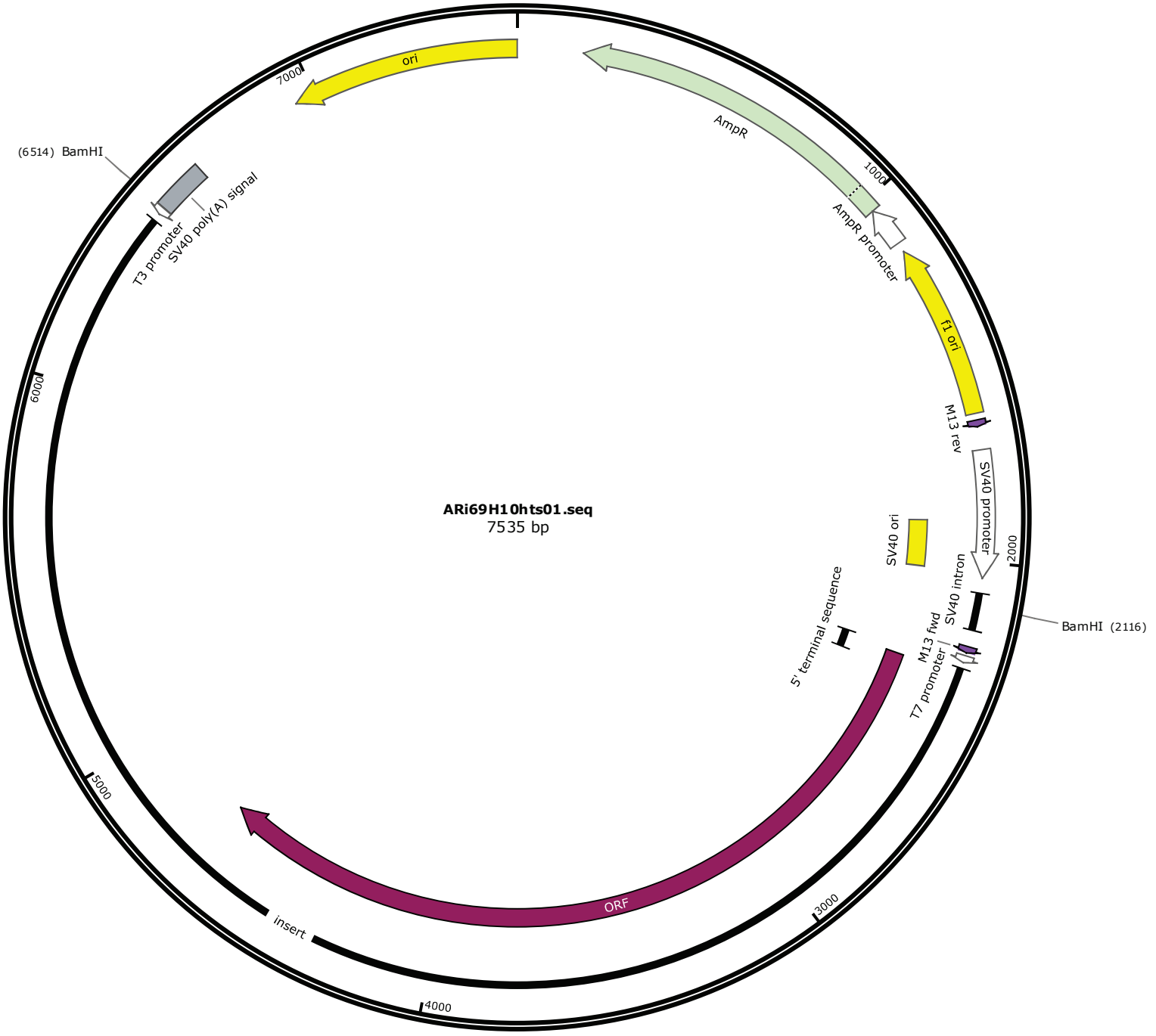
☐ Conc. : __ ng/μl, Volume : __ μl

APPROVED BY :

検
'26.06.23
笹沼

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

1 つのフィーチャーが非表示です



BLAST Results

Questions/comments

Blast 2 sequences

Job title: NM_001033336:Mus musculus ATP-binding cassette,...

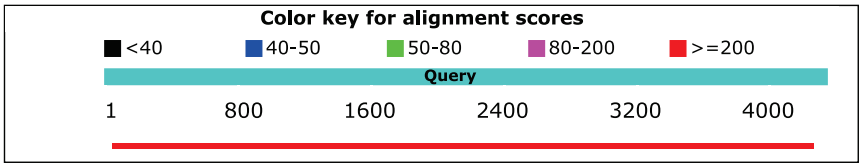
RID 3786CZNH114 (Expires on 06-19 15:39 pm)

Query ID	NM_015323.5	**Subject ID**	lcl|Query_7669051
Description	Homo sapiens UFM1 specific ligase 1 (UFL1), mRNA	**Description**	None
Molecule type	nucleic acid		See details
Query Length	4226	**Molecule type**	dna
		Subject Length	7535
		Program	BLASTN 2.17.0+

ARi69H10hts01.seq

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	7705	7705	99%	0.0	99.98%	Query_7669051

Alignments

Sequence ID: Query_7669051 Length: 7535 Number of Matches: 1
Range 1: 2279 to 6453

Score	Expect	Identities	Gaps	Strand	Frame
7705 bits(4172)	0.0()	4174/4175(99%)	0/4175(0%)	Plus/Plus	

Features:

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CDS:E3 UFM1-protein   1                    M  A  D  A  W  E  E  I  R  R  L  A  A  D
Query                 52   CTGCGAGTCAGGCCGTGATGGCGGACGCCTGGGAAGAGATTAGGCGGTTGGCGGCCGACT  111
Sbjct                 2279 ............................................................  2338

CDS:E3 UFM1-protein   15   F  Q  R  A  Q  F  A  E  A  T  Q  R  L  S  E  R  N  C  I  E
Query                 112  TCCAGCGGGCGCAGTTCGCCGAGGCCACGCAGAGGTTGTCCGAGCGGAACTGCATTGAGA  171
Sbjct                 2339 ............................................................  2398

CDS:E3 UFM1-protein   35   I  V  N  K  L  I  A  Q  K  Q  L  E  V  V  H  T  L  D  G  K
Query                 172  TTGTTAATAAATTGATTGCTCAGAAACAGCTAGAAGTAGTTCATACACTCGATGGAAAGG  231
Sbjct                 2399 ............................................................  2458

CDS:E3 UFM1-protein   55   E  Y  I  T  P  A  Q  I  S  K  E  M  R  D  E  L  H  V  R  G
Query                 232  AATATATTACTCCAGCCCAAATTAGTAAAGAAATGAGAGATGAGCTACATGTCCGAGGTG  291
Sbjct                 2459 ............................................................  2518

CDS:E3 UFM1-protein   75   G  R  V  N  I  V  D  L  Q  Q  V  I  N  V  D  L  I  H  I  E
Query                 292  GTCGAGTAAACATTGTTGATCTACAACAGGTAATTAATGTGGACCTGATTCATATTGAAA  351
Sbjct                 2519 ............................................................  2578

CDS:E3 UFM1-protein   95   N  R  I  G  D  I  I  K  S  E  K  H  V  Q  L  V  L  G  Q  L
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Query                352   ATAGAATTGGTGACATTATTAAATCAGAAAAGCATGTTCAGTTAGTGTTGGGACAACTGA  411
Sbjct               2579   ..............................................................  2638

CDS:E3 UFM1-protein  115   I  D  E  N  Y  L  D  R  L  A  E  E  V  N  D  K  L  Q  E  S
Query                412   TAGATGAGAATTATTTGGATCGGTTGGCAGAAGAGGTCAATGATAAATTGCAAGAAAGTG  471
Sbjct               2639   ..............................................................  2698

CDS:E3 UFM1-protein  135   G  Q  V  T  I  S  E  L  C  K  T  Y  D  L  P  G  N  F  L  T
Query                472   GTCAGGTCACCATATCAGAACTGTGTAAAACTTATGATCTTCCTGGGAACTTTCTGACAC  531
Sbjct               2699   ..............................................................  2758

CDS:E3 UFM1-protein  155   Q  A  L  T  Q  R  L  G  R  I  I  S  G  H  I  D  L  D  N  R
Query                532   AGGCACTAACTCAGCGACTTGGTAGAATTATCAGTGGACATATTGATCTTGATAATAGAG  591
Sbjct               2759   ..............................................................  2818

CDS:E3 UFM1-protein  175   G  V  I  F  T  E  A  F  V  A  R  H  K  A  R  I  R  G  L  F
Query                592   GAGTAATTTTTACGGAAGCTTTTGTAGCTCGACATAAAGCACGTATCCGTGGACTATTCA  651
Sbjct               2819   ..............................................................  2878

CDS:E3 UFM1-protein  195   S  A  I  T  R  P  T  A  V  N  S  L  I  S  K  Y  G  F  Q  E
Query                652   GTGCTATTACCCGGCCTACAGCTGTGAATTCTTTGATTTCAAAATATGGATTTCAGGAGC  711
Sbjct               2879   ..............................................................  2938

CDS:E3 UFM1-protein  215   Q  L  L  Y  S  V  L  E  E  L  V  N  S  G  R  L  R  G  T  V
Query                712   AGCTTCTTTACTCTGTGCTTGAGGAACTTGTTAATAGCGGACGCTTACGAGGCACTGTGG  771
Sbjct               2939   ..............................................................  2998

CDS:E3 UFM1-protein  235   V  G  G  R  Q  D  K  A  V  F  V  P  D  I  Y  S  R  T  Q  S
Query                772   TTGGTGGGAGACAGGATAAAGCTGTGTTTGTCCCTGACATCTACTCCAGGACACAGAGTA  831
Sbjct               2999   ..............................................................  3058

CDS:E3 UFM1-protein  255   T  W  V  D  S  F  F  R  Q  N  G  Y  L  E  F  D  A  L  S  R
Query                832   CTTGGGTGGATTCCTTTTTCAGGCAGAATGGCTATCTAGAATTTGATGCTTTGTCCAGAC  891
Sbjct               3059   ..............................................................  3118

CDS:E3 UFM1-protein  275   L  G  I  P  D  A  V  S  Y  I  K  K  R  Y  K  T  T  Q  L  L
Query                892   TTGGAATCCCAGATGCTGTAAGCTACATAAAGAAAAGATATAAGACTACACAACTCTTGT  951
Sbjct               3119   ..............................................................  3178

CDS:E3 UFM1-protein  295   F  L  K  A  A  C  V  G  Q  G  L  V  D  Q  V  E  A  S  V  E
Query                952   TTTTGAAAGCAGCTTGTGTTGGTCAAGGACTTGTGGATCAAGTGGAAGCATCAGTAGAAG 1011
Sbjct               3179   ..............................................................  3238

CDS:E3 UFM1-protein  315   E  A  I  S  S  G  T  W  V  D  I  A  P  L  L  P  T  S  L  S
Query               1012   AAGCCATCAGCTCTGGAACATGGGTTGATATTGCACCTCTGCTACCCACTTCTTTATCAG 1071
Sbjct               3239   ..............................................................  3298

CDS:E3 UFM1-protein  335   V  E  D  A  A  I  L  L  Q  Q  V  M  R  A  F  S  K  Q  A  S
Query               1072   TTGAAGATGCTGCCATATTGCTTCAGCAGGTGATGAGGGCATTCAGCAAACAGGCCTCAA 1131
Sbjct               3299   ..............................................................  3358

CDS:E3 UFM1-protein  355   T  V  V  F  S  D  T  V  V  V  S  E  K  F  I  N  D  C  T  E
Query               1132   CTGTAGTCTTTAGCGACACTGTTGTAGTCAGTGAAAAATTTATAAATGACTGTACAGAAC 1191
Sbjct               3359   ..............................................................  3418

CDS:E3 UFM1-protein  375   L  F  R  E  L  M  H  Q  K  A  E  K  E  M  K  N  N  P  V  H
Query               1192   TGTTCCGTGAGCTGATGCACCAGAAAGCTGAAAAGGAAATGAAAAATAATCCTGTGCATT 1251
Sbjct               3419   ..............................................................  3478

CDS:E3 UFM1-protein  395   L  I  T  E  E  D  L  K  Q  I  S  T  L  E  S  V  S  T  S  K
Query               1252   TAATCACTGAAGAAGATCTGAAACAAATCTCCACTTTAGAAAGCGTTAGTACAAGTAAAA 1311
Sbjct               3479   ..............................................................  3538

CDS:E3 UFM1-protein  415   K  D  K  K  D  E  R  R  R  K  A  T  E  G  S  G  S  M  R  G
Query               1312   AGGATAAAAAAGATGAGCGAAGAAGGAAAGCAACAGAGGGCAGTGGAAGCATGAGAGGAG 1371
Sbjct               3539   ..............................................................  3598

CDS:E3 UFM1-protein  435   G  G  G  G  N  A  R  E  Y  K  I  K  K  V  K  K  K  G  R  K
Query               1372   GAGGTGGGGGCAATGCCAGAGAGTACAAAATTAAAAAAGTCAAGAAGAAAGGAAGAAAAG 1431
Sbjct               3599   ..............................................................  3658

CDS:E3 UFM1-protein  455   D  D  D  S  D  D  E  S  Q  S  S  H  T  G  K  K  K  P  E  I
Query               1432   ATGATGATAGTGATGATGAATCTCAATCATCCCACACTGGAAAGAAGAAGCCAGAGATCA 1491
Sbjct               3659   ..............................................................  3718

CDS:E3 UFM1-protein  475   S  F  M  F  Q  D  E  I  E  D  F  L  R  K  H  I  Q  D  A  P
Query               1492   GTTTTATGTTCCAGGATGAGATTGAAGATTTTTTAAGAAAACACATACAAGATGCCCCTG 1551
Sbjct               3719   ..............................................................  3778

CDS:E3 UFM1-protein  495   E  E  F  I  S  E  L  A  E  Y  L  I  K  P  L  N  K  T  Y  L
Query               1552   AGGAGTTTATTTCGGAACTTGCTGAGTACTTAATAAAACCTCTTAATAAAACTTATCTCG 1611
Sbjct               3779   ..............................................................  3838

CDS:E3 UFM1-protein  515   E  V  V  R  S  V  F  M  S  S  T  T  S  A  S  G  T  G  R  K
Query               1612   AGGTGGTACGTTCAGTATTCATGTCTTCAACAACTTCTGCTTCTGGGACGGGCAGAAAAC 1671
Sbjct               3839   ..............................................................  3898

CDS:E3 UFM1-protein  535   R  T  I  K  D  L  Q  E  E  V  S  N  L  Y  N  N  I  R  L  F
Query               1672   GCACAATCAAGGACTTGCAAGAAGAAGTTTCAAACCTGTACAATAACATTAGGTTATTTG 1731
Sbjct               3899   ..............................................................  3958

CDS:E3 UFM1-protein  555   E  K  G  M  K  F  F  A  D  D  T  Q  A  A  L  T  K  H  L  L
Query               1732   AAAAAGGGATGAAGTTTTTTGCAGATGACACACAGGCTGCTCTTACCAAACACTTGCTGA 1791
Sbjct               3959   ..............................................................  4018

CDS:E3 UFM1-protein  575   K  S  V  C  T  D  I  T  N  L  I  F  N  F  L  A  S  D  L  M
Query               1792   AGTCAGTGTGTACTGATATCACTAACCTCATTTTCAACTTCTTAGCTTCGGATTTAATGA 1851
Sbjct               4019   ..............................................................  4078

CDS:E3 UFM1-protein  595   M  A  V  D  D  P  A  A  I  T  S  E  I  R  K  K  I  L  S  K
Query               1852   TGGCAGTAGACGATCCTGCAGCCATTACAAGTGAAATAAGAAAGAAAATTTTAAGTAAAT 1911
Sbjct               4079   ..............................................................  4138

CDS:E3 UFM1-protein  615   L  S  E  E  T  K  V  A  L  T  K  L  H  N  S  L  N  E  K  S
Query               1912   TATCAGAAGAAACCAAAGTAGCTCTTACAAAACTCCATAACTCTCTGAATGAAAAGAGCA 1971
Sbjct               4139   ..............................................................  4198

CDS:E3 UFM1-protein  635   I  E  D  F  I  S  C  L  D  S  A  A  E  A  C  D  I  M  V  K
Query               1972   TAGAAGACTTTATTTCTTGTCTGGATTCTGCAGCAGAAGCTTGTGATATTATGGTGAAAA 2031
Sbjct               4199   .......T.......................................................  4258

CDS:E3 UFM1-protein  655   R  G  D  K  K  R  E  R  Q  I  L  F  Q  H  R  Q  A  L  A  E
Query               2032   GGGGAGACaaaaaaaGGGAAAGACAGATACTGTTCCAACATCGACAAGCACTGGCTGAAC 2091
Sbjct               4259   ..............................................................  4318

CDS:E3 UFM1-protein  675   Q  L  K  V  T  E  D  P  A  L  I  L  H  L  T  S  V  L  L  F
Query               2092   AGCTAAAGGTCACAGAAGACCCTGCTCTTATTCTGCACCTCACATCAGTCCTGTTGTTTC 2151
Sbjct               4319   ..............................................................  4378
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CDS:E3 UFM1-protein   695  Q  F  S  T  H  S  M  L  H  A  P  G  R  C  V  P  Q  I  I  A
Query                2152  AGTTTTCAACCCACAGCATGCTCCATGCACCTGGAAGATGTGTCCCACAGATCATTGCTT  2211
Sbjct                4379  ............................................................  4438

CDS:E3 UFM1-protein   715  F  L  N  S  K  I  P  E  D  Q  H  A  L  L  V  K  Y  Q  G  L
Query                2212  TTCTTAATAGTAAAATTCCAGAGGATCAGCATGCTCTTTTGGTAAAGTATCAAGGTTTGG  2271
Sbjct                4439  ............................................................  4498

CDS:E3 UFM1-protein   735  V  V  K  Q  L  V  S  Q  S  K  K  T  G  Q  G  D  Y  P  L  N
Query                2272  TTGTAAAGCAGCTAGTCAGTCAAAGTAAGAAGACTGGGCAGGGAGATTATCCCTTGAATA  2331
Sbjct                4499  ............................................................  4558

CDS:E3 UFM1-protein   755  N  E  L  D  K  E  Q  E  D  V  A  S  T  T  R  K  E  L  Q  E
Query                2332  ATGAATTAGACAAAGAACAAGAAGATGTTGCCAGTACTACTCGTAAAGAGCTTCAAGAAC  2391
Sbjct                4559  ............................................................  4618

CDS:E3 UFM1-protein   775  L  S  S  S  I  K  D  L  V  L  K  S  R  K  S  S  V  T  E  E
Query                2392  TTTCTTCATCCATTAAAGACCTTGTTCTCAAATCTAGGAAATCATCTGTGACGGAAGAGT  2451
Sbjct                4619  ............................................................  4678

Query                2452  AATGATCTTAATTTACATTTGTCATATAGTAAGCATTTTCCCCCAAGGTTGAAGGTGAGT  2511
Sbjct                4679  ............................................................  4738

Query                2512  GGTCACAAAAAAGTAGTCACTATACAACTCCCCTCTCCCTGCAAAAACCACCTCATACAC  2571
Sbjct                4739  ............................................................  4798

Query                2572  ACACAATTCAGTTAAAACAGTAGTATTGTATTAAATGTAAATCTTAAAAAGATGTGAATT  2631
Sbjct                4799  ............................................................  4858

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Sbjct                4859  ............................................................  4918

Query                2692  TGAAATTTTTCACATTATTTTCACATAATTTTAAAAATTACATATTTCAGGTTTGTTCTC  2751
Sbjct                4919  ............................................................  4978

Query                2752  TTTCCAAATGTTGAATGAAAAACAAATTTTCCAATCCATTTATCCCTGGGGAAGGATTCA  2811
Sbjct                4979  ............................................................  5038

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Sbjct                5039  ............................................................  5098

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Sbjct                5159  ............................................................  5218

Query                2992  aaaTTATTACTAAGCCCTTGCTCTTATTTTTGGCAGAATAAACATTGATTTTGGTTGGGG  3051
Sbjct                5219  ............................................................  5278

Query                3052  CTGCAAGGATGCCTTTACAGGTGCACAAGAACGCTAGAGTGGCCCATGCATTGCTGTGTT  3111
Sbjct                5279  ............................................................  5338

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Sbjct                5339  ............................................................  5398

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Sbjct                5579  ............................................................  5638

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Query                3532  tgaatataattataaattaaatttcaaatatttaaaaatactattttatataattcctta  3591
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Sbjct                6239  ............................................................  6298

Query                4072  TAAAGAACAGTTTTTATTGTTTTGTAAGTAAAATTACGTAGCTGATTTTGTATGTAAAGA  4131
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Query                4132  TTAATTTCCATAATAAAAATTATTGTATGTTTACTGTGATCTTAATGGGCAGGGTTAAGA  4191
Sbjct                6359  ............................................................  6418

Query                4192  AAGTTATTTAAAATAAAGTTACCTATTCTACTAAA  4226
Sbjct                6419  ...................................  6453
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