NRCD Human Full-Length cDNA Clone

Gene Engineering Division
RIKEN BioResource Research Center

RIKEN Clone ID : ARi48G03

Lot# : 7675_B6Go

Vector : pGCAP10

Gene	UFSP2	
RefSeq_mRNA	NM_018359.5	2361 bp

● Plasmid DNA purification

Date : 2026/07/28 Culture : LB (100 ug/ml Ampicillin) 5 ml -> at 37 deg C O/N

Date : 2026/07/29 Purification : QIAGEN Miniprep kit -> dH_2O 100 ul

● Digestion by restriction enzyme/Concentrarion calibration

Date : 2026/07/29

DNA concentration (O.D.): 296 ng/ul

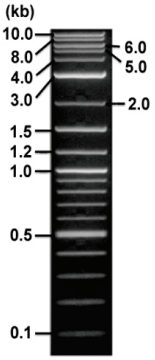
DNA	0.35	ul
Enzyme (BamHI)	1	ul
Buffer H	1	ul
dH_2O	7.65	ul
Total	10	ul

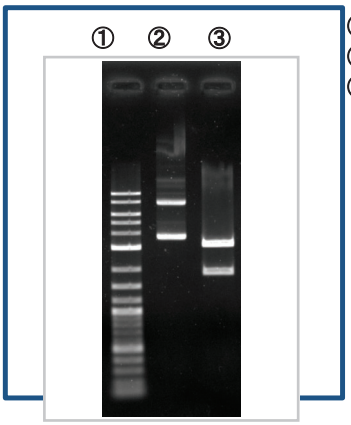
< Size of fragment expected from this clone >

BamHI 3.1kb (vector), 1.8 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 : 2026/08/03

full sequence	ARi48G03hts01.seq

● Adjust plasmid DNA solution to 25 ng/ul

Date : 2026/08/04

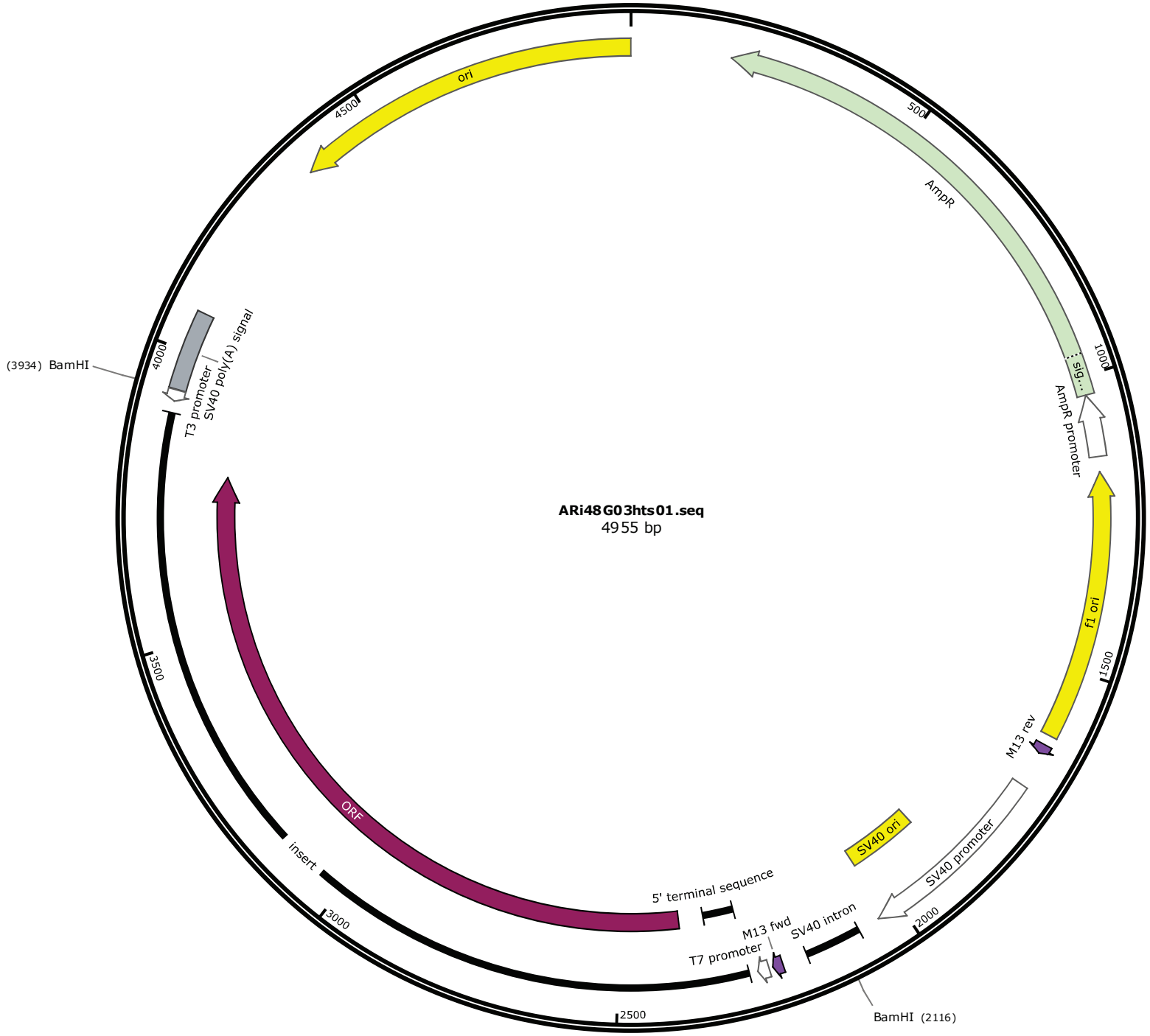
DNA (296 ng/ul)	86	ul
10x TE	102	ul
dH_2O	830	ul
Total	1,018	ul

● Shipping

☑ Conc. : 25 ng/μl, Volume : 40 μl

☐ Conc. : ___ ng/μl, Volume : ___ μl

APPROVED BY : 検 '26.08.04 笹沼


ARi48G03hts01.seq
4955 bp
ori
AmpR
AmpR promoter
f1 ori
M13 rev
SV40 ori
SV40 promoter
SV40 intron
M13 fwd
T7 promoter
5' terminal sequence
ORF
insert
T3 promoter
SV40 poly(A) signal
(3934) BamHI
BamHI (2116)
500
1000
1500
2000
2500
3000
3500
4000
4500

BLAST Results

Questions/comments

Blast 2 sequences

Job title: ref|NM_018359.5|

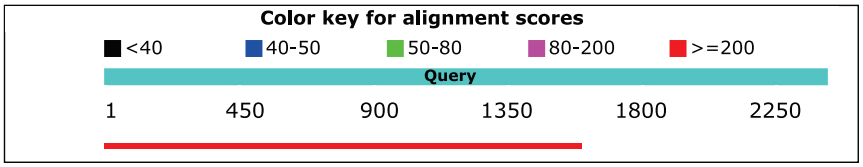
RID 6ZTJ50K8114 (Expires on 08-04 08:52 am)

Query ID	NM_018359.5	**Subject ID**	lcl|Query_409403
Description	Homo sapiens UFM1 specific peptidase 2 (UFSP2), transcript variant 1, mRNA	**Description**	None See details
Molecule type	nucleic acid	**Molecule type**	dna
Query Length	2361	**Subject Length**	4955
		Program	BLASTN 2.17.0+

Graphic Summary

ARi48G03hts01.seq

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	2913	2913	67%	0.0	99.81%	Query_409403

Alignments

Sequence ID: Query_409403 Length: 4955 Number of Matches: 1
Range 1: 2290 to 3875

Score	Expect	Identities	Gaps	Strand	Frame
2913 bits(1577)	0.0()	1583/1586(99%)	0/1586(0%)	Plus/Plus	

Features:

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Query          1     GCCCCGCCCCTGGGCCGTGCGGTGACACCACTTCAGGGCCGGCCCCCGGAACTTTTGGGC  60
Sbjct          2290  .........................G.....................G.....  2349

CDS:ufm1-specific pr 1                                    M  V  I  S  E  S  M  D
Query          61    AGGCGTCAGCGCCCGTGTCACCGCCACGTCGCGGACATGGTGATTTCAGAAAGTATGGAT  120
Sbjct          2350  ...T..........................................................  2409

CDS:ufm1-specific pr 9     I  L  F  R  I  R  G  G  L  D  L  A  F  Q  L  A  T  P  N  E
Query          121   ATACTCTTCAGAATAAGAGGAGGCCTTGATTTGGCTTTTCAGCTAGCTACTCCTAATGAA  180
Sbjct          2410  ..........................................................  2469

CDS:ufm1-specific pr 29    I  F  L  K  K  A  L  K  H  V  L  S  D  L  S  T  K  L  S  S
Query          181   ATTTTTCTCAAGAAGGCACTGAAACATGTGTTGAGTGACCTGTCAACTAAGCTGTCTTCA  240
Sbjct          2470  ..........................................................  2529

CDS:ufm1-specific pr 49    N  A  L  V  F  R  I  C  H  S  S  V  Y  I  W  P  S  S  D  I
Query          241   AACGCCCTTGTGTTCAGAATTTGCCACAGTTCAGTGTATATATGGCCTAGCAGTGACATA  300
Sbjct          2530  ..........................................................  2589

CDS:ufm1-specific pr 69    N  T  I  P  G  E  L  T  D  A  S  A  C  K  N  I  L  R  F  I
Query          301   AACACCATTCCTGGAGAACTGACTGATGCTTCTGCTTGTAAGAACATACTGCGCTTTATT  360
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Sbjct                 2590  ..........................................................  2649

CDS:ufm1-specific pr  89     Q  F  E  P  E  E  D  I  K  R  K  F  M  R  K  K  D  K  K  L
Query                 361   CAATTTGAGCCAGAAGAAGATATAAAAAGAAAATTCATGAGAAAGAAGGACAAAAAGTTA  420
Sbjct                 2650  ..........................................................  2709

CDS:ufm1-specific pr  109    S  D  M  H  Q  I  V  N  I  D  L  M  L  E  M  S  T  S  L  A
Query                 421   TCAGACATGCATCAAATAGTAAATATAGATCTTATGCTGGAAATGTCAACCTCCCTGGCA  480
Sbjct                 2710  ..........................................................  2769

CDS:ufm1-specific pr  129    A  V  T  P  I  I  E  R  E  S  G  G  H  H  Y  V  N  M  T  L
Query                 481   GCTGTAACGCCCATCATTGAAAGGGAAAGCGGAGGACACCATTATGTTAATATGACTTTA  540
Sbjct                 2770  ..........................................................  2829

CDS:ufm1-specific pr  149    P  V  D  A  V  I  S  V  A  P  E  E  T  W  G  K  V  R  K  L
Query                 541   CCTGTCGATGCAGTTATATCTGTTGCTCCAGAAGAAACATGGGGAAAAGTTCGTAAACTC  600
Sbjct                 2830  ..........................................................  2889

CDS:ufm1-specific pr  169    L  V  D  A  I  H  N  Q  L  T  D  M  E  K  C  I  L  K  Y  M
Query                 601   CTGGTTGATGCAATTCATAATCAACTAACTGACATGGAAAAATGTATTTTGAAATATATG  660
Sbjct                 2890  ..........................................................  2949

CDS:ufm1-specific pr  189    K  G  T  S  I  V  V  P  E  P  L  H  F  L  L  P  G  K  K  N
Query                 661   AAAGGAACATCTATTGTGGTCCCTGAACCACTGCACTTTTTATTACCAGGGaaaaaaaaT  720
Sbjct                 2950  ..........................................................  3009

CDS:ufm1-specific pr  209    L  V  T  I  S  Y  P  S  G  I  P  D  G  Q  L  Q  A  Y  R  K
Query                 721   CTTGTAACAATTTCATATCCTTCAGGAATACCAGATGGCCAGCTGCAGGCCTATAGGAAG  780
Sbjct                 3010  ..........................................................  3069

CDS:ufm1-specific pr  229    E  L  H  D  L  F  N  L  P  H  D  R  P  Y  F  K  R  S  N  A
Query                 781   GAGTTACATGATCTTTTCAATCTGCCTCACGACAGACCCTATTTCAAAAGGTCTAATGCT  840
Sbjct                 3070  ..........................................................  3129

CDS:ufm1-specific pr  249    Y  H  F  P  D  E  P  Y  K  D  G  Y  I  R  N  P  H  T  Y  L
Query                 841   TATCACTTTCCAGATGAGCCATACAAAGATGGTTACATTAGAAATCCACATACTTACCTT  900
Sbjct                 3130  ..........................................................  3189

CDS:ufm1-specific pr  269    N  P  P  N  M  E  T  G  M  I  Y  V  V  Q  G  I  Y  G  Y  H
Query                 901   AATCCACCTAACATGGAGACTGGTATGATTTATGTGGTCCAGGGCATATATGGCTATCAT  960
Sbjct                 3190  ..........................................................  3249

CDS:ufm1-specific pr  289    H  Y  M  Q  D  R  I  D  D  N  G  W  G  C  A  Y  R  S  L  Q
Query                 961   CATTATATGCAGGATCGCATAGATGACAATGGCTGGGGCTGTGCTTATCGATCTCTGCAG  1020
Sbjct                 3250  ..........................................................  3309

CDS:ufm1-specific pr  309    T  I  C  S  W  F  K  H  Q  G  Y  T  E  R  S  I  P  T  H  R
Query                 1021  ACTATCTGCTCTTGGTTCAAACATCAGGGATACACAGAGAGGTCCATTCCAACACACAGA  1080
Sbjct                 3310  ..........................................................  3369

CDS:ufm1-specific pr  329    E  I  Q  Q  A  L  V  D  A  G  D  K  P  A  T  F  V  G  S  R
Query                 1081  GAAATTCAGCAGGCTCTAGTCGATGCCGGGGACAAACCAGCAACATTTGTCGGATCGCGG  1140
Sbjct                 3370  ..........................................................  3429

CDS:ufm1-specific pr  349    Q  W  I  G  S  I  E  V  Q  L  V  L  N  Q  L  I  G  I  T  S
Query                 1141  CAATGGATTGGATCTATTGAGGTGCAGCTGGTACTAAACCAATTGATCGGTATAACGTCA  1200
Sbjct                 3430  ..........................................................  3489

CDS:ufm1-specific pr  369    K  I  L  F  V  S  Q  G  S  E  I  A  S  Q  G  R  E  L  A  N
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Query                 1201  AAAATCCTGTTTGTCAGCCAAGGTTCAGAAATTGCCTCTCAAGGACGGGAACTGGCTAAT  1260
Sbjct                 3490  ..........................................................  3549

CDS:ufm1-specific pr  389    H  F  Q  S  E  G  T  P  V  M  I  G  G  G  V  L  A  H  T  I
Query                 1261  CATTTCCAAAGTGAAGGAACTCCAGTTATGATCGGGGGAGGAGTTTTGGCCCACACAATA  1320
Sbjct                 3550  ..........................................................  3609

CDS:ufm1-specific pr  409    L  G  V  A  W  N  E  I  T  G  Q  I  K  F  L  I  L  D  P  H
Query                 1321  CTAGGAGTTGCATGGAATGAGATTACAGGGCAGATAAAGTTTCTGATTCTAGATCCACAT  1380
Sbjct                 3610  ..........................................................  3669

CDS:ufm1-specific pr  429    Y  T  G  A  E  D  L  Q  V  I  L  E  K  G  W  C  G  W  K  G
Query                 1381  TATACCGGTGCTGAAGACCTGCAAGTTATTTTGGAAAAGGGCTGGTGCGGATGGAAGGGC  1440
Sbjct                 3670  ..........................................................  3729

CDS:ufm1-specific pr  449    P  D  F  W  N  K  D  A  Y  Y  N  L  C  L  P  Q  R  P  N  M
Query                 1441  CCAGATTTTTGGAACAAGGATGCATACTATAACTTATGTCTTCCTCAGCGACCAAATATG  1500
Sbjct                 3730  ..........................................................  3789

CDS:ufm1-specific pr  469    I
Query                 1501  ATTTAAAATATCTTGGAGTCAAAGACTGCAGTAGAGTGGTATTATAAATTTGTGAATAAA  1560
Sbjct                 3790  ..........................................................  3849

Query                 1561  GAATCAGTTTAATTTTTCACATTAAA  1586
Sbjct                 3850  .........................  3875
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