NRCD Human Full-Length cDNA Clone

Gene Engineering Division
RIKEN BioResource Research Center

RIKEN Clone ID : ARh05G08
Vector : pGCAP1

Lot# : 7674_B3Bd

Gene	SLC30A1	
RefSeq_mRNA	NM_021194.3	5893 bp

● Plasmid DNA purification

Date : 23.02.28 Culture : LB (100 ug/ml Ampicillin) 5 ml -> at 37 deg C O/N

Date : 23.03.01 Purification : QIAGEN Miniprep kit -> dH_2O 100 ul

● Digestion by restriction enzyme/Concentrarion calibration

Date : 23.03.01

DNA concentration (O.D.): 126 ng/ul

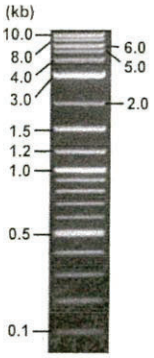
DNA	0.8 ul
Enzyme (BamHI)	1 ul
Buffer H	1 ul
dH_2O	7.2 ul
Total	10 ul

< Size of fragment expected from this clone >

BamHI 3.1kb (vector), 1.8, 0.9 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 : ARh05G08hts01.seq

● Adjust plasmid DNA solution to 25 ng/ul

Date : 2026/07/23

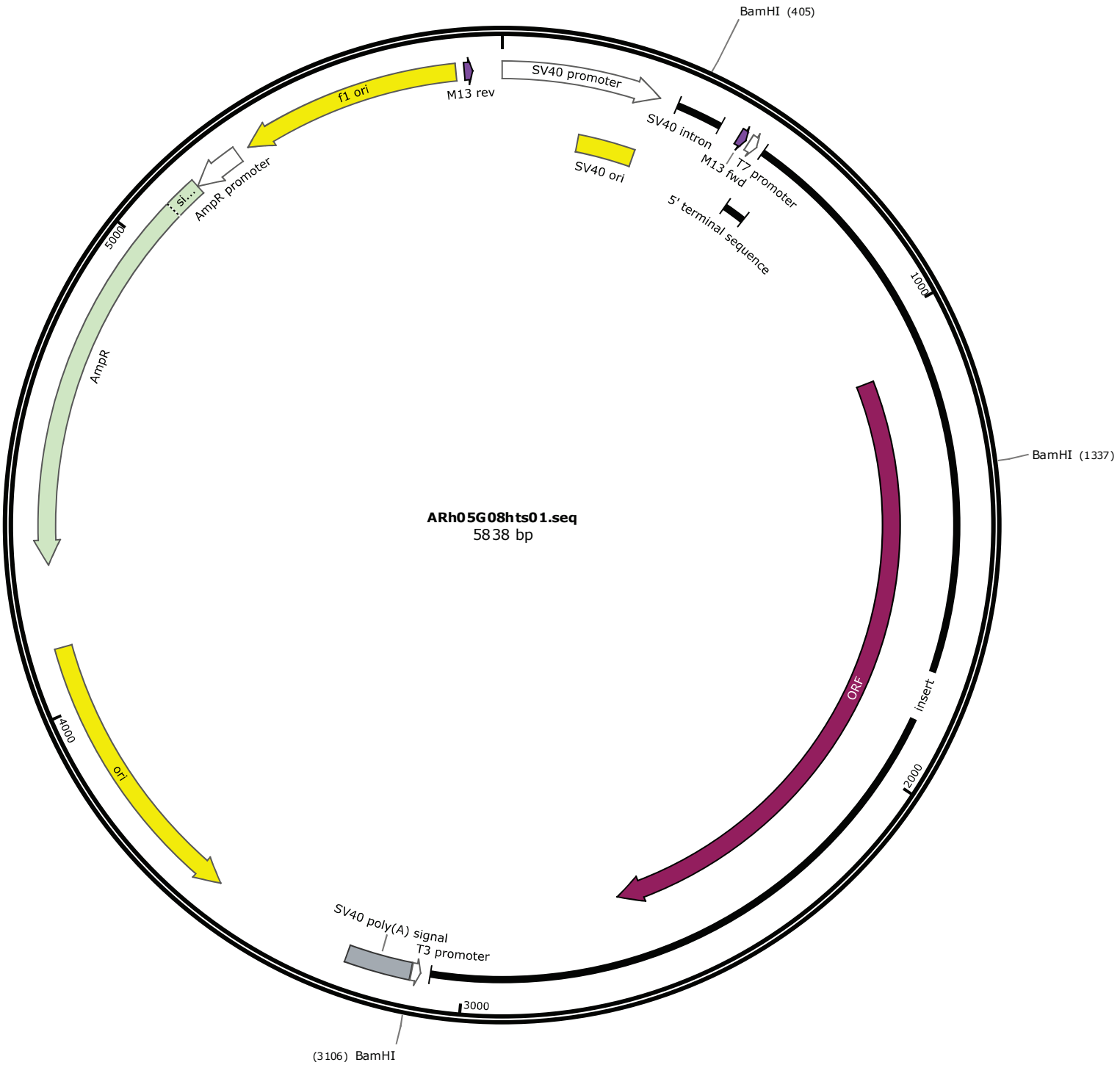
DNA (126 ng/ul)	72 ul
10x TE	36 ul
dH_2O	255 ul
Total	363 ul

● Shipping

☑ Conc. : 25 ng/μl, Volume : 40 μl

☐ Conc. : __ ng/μl, Volume : __ μl

APPROVED BY : 検 '26.07.23 笹沼


BamHI (405)
SV40 promoter
M13 rev
f1 ori
SV40 intron
M13 fwd
T7 promoter
SV40 ori
5' terminal sequence
AmpR promoter
si...
AmpR
500
1000
BamHI (1337)
ARh05G08hts01.seq
5838 bp
ORF
insert
2000
4000
ori
SV40 poly(A) signal
T3 promoter
3000
(3106) BamHI

BLAST Results

Questions/comments

Blast 2 sequences

Job title: NM_139281:Homo sapiens WD repeat domain 36...

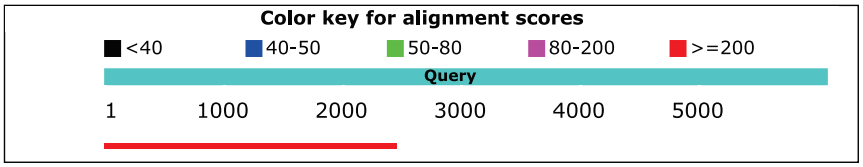
RID 370EDPC3114 (Expires on 06-19 13:27 pm)

Query ID	NM_021194.3	**Subject ID**	lcl|Query_7566713
Description	Homo sapiens solute carrier family 30 member 1 (SLC30A1), mRNA	**Description**	None See details
Molecule type	nucleic acid	**Molecule type**	dna
Query Length	5893	**Subject Length**	5838
		Program	BLASTN 2.17.0+

Graphic Summary

ARh05G08hts01.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	4473	4473	41%	0.0	100.00%	Query_7566713

Alignments

Sequence ID: Query_7566713 Length: 5838 Number of Matches: 1
Range 1: 568 to 2989

Score	Expect	Identities	Gaps	Strand	Frame
4473 bits(2422)	0.0()	2422/2422(100%)	0/2422(0%)	Plus/Plus	

Features:

```
Query  1    GAAGAAGGCGCCCGAGACCGGGCCGAGTGCAGCTGCCGTGGCCGCCGCCTCTCTAGCTCC  60
Sbjct  568  ............................................................  627

Query  61   TCAGCCATCCGCTCCTCAGTCCAGCCGCCGCAGAGGAGACCAGCAAGCAGAGCCCTCAGA  120
Sbjct  628  ............................................................  687

Query  121  TGCTCGGAGCTTTCTCGGCGCGAAGCTGCCCGTCGCCCTCTCCTGCCGCCCTCGCCCGCC  180
Sbjct  688  ............................................................  747

Query  181  GCCCTCCTGCTCCTGCTCCGGCTGCGGCTCTTGGTACCCCGGCTCCGGGAGCCCAGCTCC  240
Sbjct  748  ............................................................  807

Query  241  CCGCCACCGCCGCCGCCTGGGTGTGGGGGCTGCTGAGGCTGAGCCGGGCCTCGGCGCCGG  300
Sbjct  808  ............................................................  867

Query  301  CTCTGAGGACGGACGCCTGAGGAGCTGCGCGGCGCGGCGCCGCCGGCTGGCGGAGAACGC  360
Sbjct  868  ............................................................  927

Query  361  CCACAGGCGCGGGGCTCGGCGGCTTGACCCGGGCTTGTCCCCGTGCGGCCGCGGGGGCCC  420
Sbjct  928  ............................................................  987
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Query                 421   CTCAGCGGTTTCCCGAACGGCCCGACTCGGGCGCTCCTCCGTGTCGCGGTCGCCGACCCT  480
Sbjct                 988   ............................................................  1047

Query                 481   CCGCGTCCCGCCAACGCCGCCGCTGCACCAGTCTCCGGGCCGGGCTCGGCGGGCCCCGCA  540
Sbjct                 1048  ............................................................  1107

CDS:proton-coupled z  1                M  G  C  W  G  R  N  R  G  R  L  L  C  M  L  A  L
Query                 541   GCCGCAGCCATGGGGTGTTGGGGTCGGAACCGGGGCCGGCTGCTGTGCATGCTGGCGCTG  600
Sbjct                 1108  ............................................................  1167

CDS:proton-coupled z  18    T  F  M  F  M  V  L  E  V  V  V  S  R  V  T  S  S  L  A  M
Query                 601   ACCTTCATGTTCATGGTGCTGGAGGTGGTGGTGAGCCGGGTGACCTCGTCGCTGGCGATG  660
Sbjct                 1168  ............................................................  1227

CDS:proton-coupled z  38    L  S  D  S  F  H  M  L  S  D  V  L  A  L  V  V  A  L  V  A
Query                 661   CTCTCCGACTCCTTCCACATGCTGTCGGACGTGCTGGCGCTGGTGGTGGCGCTGGTGGCC  720
Sbjct                 1228  ............................................................  1287

CDS:proton-coupled z  58    E  R  F  A  R  R  T  H  A  T  Q  K  N  T  F  G  W  I  R  A
Query                 721   GAGCGCTTCGCCCGGCGGACCCACGCCACCCAGAAGAACACGTTCGGCTGGATCCGAGCC  780
Sbjct                 1288  ............................................................  1347

CDS:proton-coupled z  78    E  V  M  G  A  L  V  N  A  I  F  L  T  G  L  C  F  A  I  L
Query                 781   GAGGTAATGGGGGCTCTGGTGAACGCCATCTTCCTGACTGGCCTCTGTTTCGCCATCCTG  840
Sbjct                 1348  ............................................................  1407

CDS:proton-coupled z  98    L  E  A  I  E  R  F  I  E  P  H  E  M  Q  Q  P  L  V  V  L
Query                 841   CTGGAGGCCATCGAGCGCTTCATCGAGCCGCACGAGATGCAGCAGCCGCTGGTGGTCCTT  900
Sbjct                 1408  ............................................................  1467

CDS:proton-coupled z  118   G  V  G  V  A  G  L  L  V  N  V  L  G  L  C  L  F  H  H  H
Query                 901   GGGGTCGGCGTGGCCGGGCTGCTGGTCAACGTGCTGGGGCTCTGCCTCTTCCACCATCAC  960
Sbjct                 1468  ............................................................  1527

CDS:proton-coupled z  138   S  G  F  S  Q  D  S  G  H  G  H  S  H  G  G  H  G  H  G  H
Query                 961   AGCGGCTTCAGCCAGGACTCCGGCCACGGCCACTCGCACGGGGGTCACGGCCACGGCCAC  1020
Sbjct                 1528  ............................................................  1587

CDS:proton-coupled z  158   G  L  P  K  G  P  R  V  K  S  T  R  P  G  S  S  D  I  N  V
Query                 1021  GGCCTCCCCAAGGGGCCTCGCGTTAAGAGCACCCGCCCCGGGAGCAGCGACATCAACGTG  1080
Sbjct                 1588  ............................................................  1647

CDS:proton-coupled z  178   A  P  G  E  Q  G  P  D  Q  E  E  T  N  T  L  V  A  N  T  S
Query                 1081  GCCCCGGGCGAGCAGGGTCCCGACCAGGAGGAGACCAACACCCTGGTGGCCAATACCAGC  1140
Sbjct                 1648  ............................................................  1707

CDS:proton-coupled z  198   N  S  N  G  L  K  L  D  P  A  D  P  E  N  P  R  S  G  D  T
Query                 1141  AACTCCAACGGGCTGAAATTGGACCCCGCAGACCCAGAAAACCCCAGAAGTGGTGATACA  1200
Sbjct                 1708  ............................................................  1767

CDS:proton-coupled z  218   V  E  V  Q  V  N  G  N  L  V  R  E  P  D  H  M  E  L  E  E
Query                 1201  GTGGAAGTACAAGTGAATGGAAATCTTGTCAGAGAACCTGACCATATGGAACTGGAAGAA  1260
Sbjct                 1768  ............................................................  1827

CDS:proton-coupled z  238   D  R  A  G  Q  L  N  M  R  G  V  F  L  H  V  L  G  D  A  L
Query                 1261  GATAGGGCTGGACAACTTAACATGCGTGGAGTTTTTCTGCATGTCCTTGGAGATGCCTTG  1320
Sbjct                 1828  ............................................................  1887

CDS:proton-coupled z  258   G  S  V  I  V  V  V  N  A  L  V  F  Y  F  S  W  K  G  C  S


Query                 1321  GGTTCAGTGATTGTAGTAGTAAATGCCTTAGTCTTTTACTTTTCTTGGAAAGGTTGTTCT  1380
Sbjct                 1888  ............................................................  1947

CDS:proton-coupled z  278   E  G  D  F  C  V  N  P  C  F  P  D  P  C  K  A  F  V  E  I
Query                 1381  GAAGGGGATTTTTGTGTGAATCCATGTTTCCCTGACCCCTGCAAAGCATTTGTAGAAATA  1440
Sbjct                 1948  ............................................................  2007

CDS:proton-coupled z  298   I  N  S  T  H  A  S  V  Y  E  A  G  P  C  W  V  L  Y  L  D
Query                 1441  ATTAATAGTACTCATGCATCAGTTTATGAGGCTGGTCCTTGCTGGGTGCTATATTTAGAT  1500
Sbjct                 2008  ............................................................  2067

CDS:proton-coupled z  318   P  T  L  C  V  V  M  V  C  I  L  L  Y  T  T  Y  P  L  L  K
Query                 1501  CCAACTCTTTGTGTTGTAATGGTTTGTATACTTCTTTACACAACCTATCCATTACTTAAG  1560
Sbjct                 2068  ............................................................  2127

CDS:proton-coupled z  338   E  S  A  L  I  L  L  Q  T  V  P  K  Q  I  D  I  R  N  L  I
Query                 1561  GAATCTGCTCTTATTCTTCTACAAACTGTTCCTAAACAAATTGATATCAGAAATTTGATA  1620
Sbjct                 2128  ............................................................  2187

CDS:proton-coupled z  358   K  E  L  R  N  V  E  G  V  E  E  V  H  E  L  H  V  W  Q  L
Query                 1621  AAAGAACTTCGAAATGTTGAAGGAGTTGAGGAAGTTCATGAATTACATGTTTGGCAACTT  1680
Sbjct                 2188  ............................................................  2247

CDS:proton-coupled z  378   A  G  S  R  I  I  A  T  A  H  I  K  C  E  D  P  T  S  Y  M
Query                 1681  GCTGGAAGCAGAATCATTGCCACTGCTCACATAAAATGTGAAGATCCAACATCATACATG  1740
Sbjct                 2248  ............................................................  2307

CDS:proton-coupled z  398   E  V  A  K  T  I  K  D  V  F  H  N  H  G  I  H  A  T  T  I
Query                 1741  GAGGTGGCTAAAACCATTAAAGACGTTTTTCATAATCACGGAATTCACGCTACTACCATT  1800
Sbjct                 2308  ............................................................  2367

CDS:proton-coupled z  418   Q  P  E  F  A  S  V  G  S  K  S  S  V  V  P  C  E  L  A  C
Query                 1801  CAGCCTGAATTTGCTAGTGTAGGCTCTAAATCAAGTGTAGTTCCGTGTGAACTTGCCTGC  1860
Sbjct                 2368  ............................................................  2427

CDS:proton-coupled z  438   R  T  Q  C  A  L  K  Q  C  C  G  T  L  P  Q  A  P  S  G  K
Query                 1861  AGAACCCAGTGTGCTTTGAAGCAATGTTGTGGGACACTACCACAAGCCCCTTCTGGAAAG  1920
Sbjct                 2428  ............................................................  2487

CDS:proton-coupled z  458   D  A  E  K  T  P  A  V  S  I  S  C  L  E  L  S  N  N  L  E
Query                 1921  GATGCAGAAAAGACCCCAGCAGTTAGCATTTCTTGTTTAGAACTTAGTAACAATCTAGAG  1980
Sbjct                 2488  ............................................................  2547

CDS:proton-coupled z  478   K  K  P  R  R  T  K  A  E  N  I  P  A  V  V  I  E  I  K  N
Query                 1981  AAGAAGCCCAGGAGGACTAAAGCTGAAAACATCCCTGCTGTTGTGATAGAGATTAAAAAC  2040
Sbjct                 2548  ............................................................  2607

CDS:proton-coupled z  498   M  P  N  K  Q  P  E  S  S  L
Query                 2041  ATGCCAAACAAACAACCTGAATCATCTTTGTGAGTCTTGAAAAAGATGTGATATTTGACT  2100
Sbjct                 2608  ............................................................  2667

Query                 2101  TTTGCTTTAAACTGCAAGAGGAAAAAGACTCCACTGAAATTCTAAGTTTGCCAAGTAGTG  2160
Sbjct                 2668  ............................................................  2727

Query                 2161  TAATTGAAGTCCTTGTCTGGTCACACAGTTTAATTCTATTTTTGTAAGAACATAATGGGA  2220
Sbjct                 2728  ............................................................  2787

Query                 2221  CTGCATAACAGAGTTCTATATTACAATTTTGTGATTATTAGTACAGAGTACAGCTATGCT  2280
Sbjct                 2788  ............................................................  2847
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Query  2281  GTGACTGTTTTGGAAAGCCAGTTTTAACACTATGTTACATTTTTGTTTAAAGTAAGTTAA  2340
Sbjct  2848  ............................................................  2907

Query  2341  ACCTTATATAACATAATGACATTTGATTTCTGGATTTTTCCCATGATAAAAATTAGGGGG  2400
Sbjct  2908  ............................................................  2967

Query  2401  ATAAATAAAATTGTTACTGGAA  2422
Sbjct  2968  ......................  2989
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