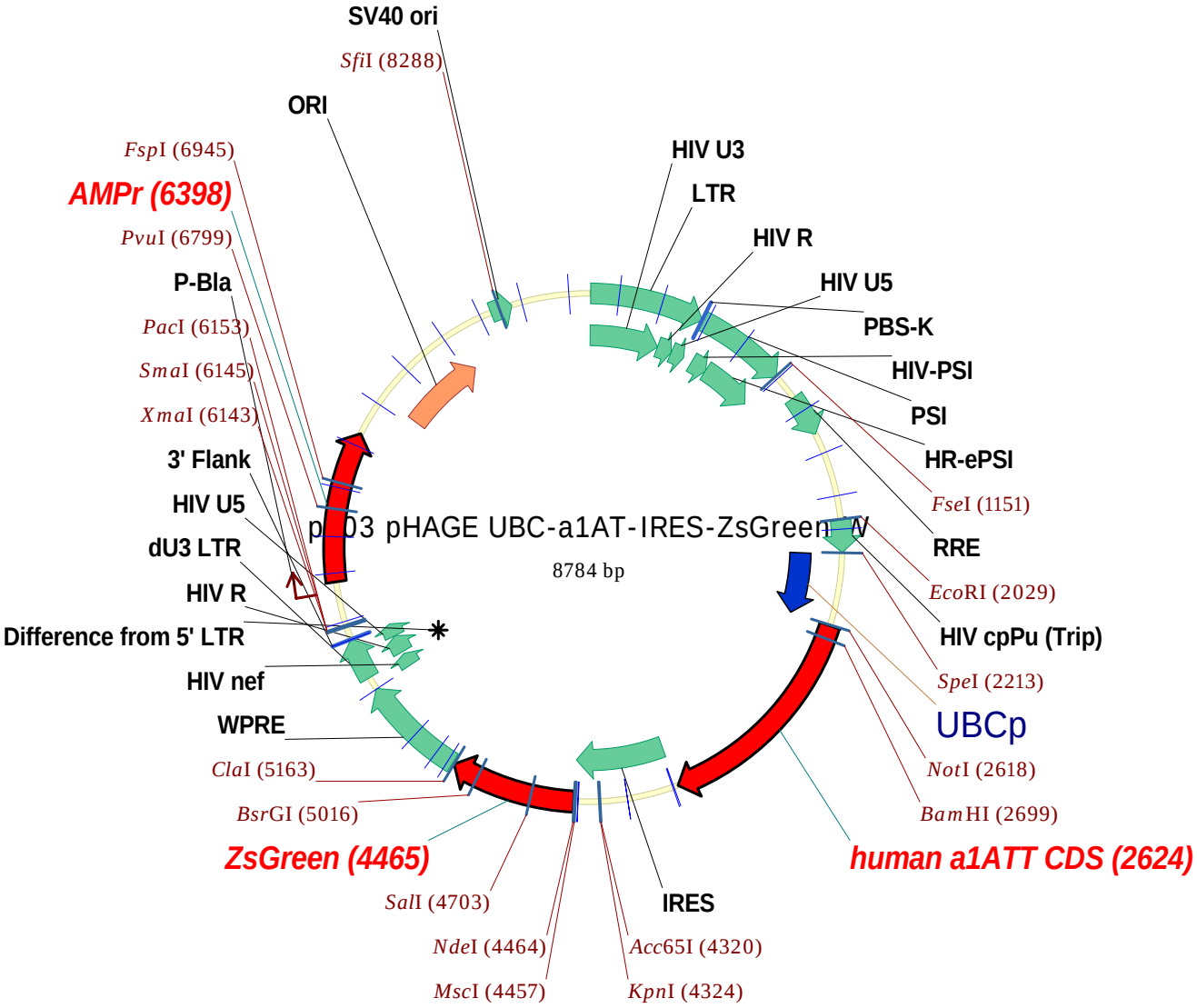
SV40 ori
SfiI (8288)
ORI
FspI (6945)
AMPr (6398)
PvuI (6799)
P-Bla
PacI (6153)
SmaI (6145)
XmaI (6143)
3' Flank
HIV U5
dU3 LTR
HIV R
Difference from 5' LTR
HIV nef
WPRE
ClaI (5163)
BsrGI (5016)
ZsGreen (4465)
SalI (4703)
NdeI (4464)
MscI (4457)
IRES
Acc65I (4320)
KpnI (4324)
human a1ATT CDS (2624)
BamHI (2699)
NotI (2618)
SpeI (2213)
UBCp
EcoRI (2029)
HIV cpPu (Trip)
RRE
FseI (1151)
HR-ePSI
PSI
HIV-PSI
PBS-K
HIV U5
HIV R
LTR
HIV U3
p203 pHAGE UBC-a1AT-IRES-ZsGreen-W
8784 bp

General Description

DNA p203 pHAGE UBC-a1AT-IRES-ZsGreen-W
Entire molecule length: 8784 bp

Standard Fields

User Fields

Author(s)

Author

Original author

A Omari

References

Comments

Sequenced 12/13/04 by AAW. AAT insert including both junctions and portions of UBC promotor and

Feature Map

CDS (3 total)

human a1ATT CDS

Start: 2624 End: 3877

ZsGreen

Start: 4465 End: 5160
ZsGreen Fluorescent Protein

AMPr

Start: 6398 End: 7237
Ampicillin Resistance Gene
Original Location Description:
6153..6992
Qualifiers:
/gene="AMPr"
/product="beta-lactamase (mature form)"

Misc. Feature (17 total)

LTR

Start: 1 End: 636
Long Terminal Repeat
Original Location Description:
1..636
Qualifiers:
/gene="LTR"

HIV U3

Start: 1 End: 453
Full Length HIV U3

HIV R

Start: 454 End: 551
HIV Repeat Region

HIV U5

Start: 552 End: 636
HIV U5

PBS-K

Start: 636 End: 658
tRNA binding site for Lysine tRNA

PSI

Start: 637 End: 1155
PSI Packaging Sequence
Original Location Description:
637..1155
Qualifiers:
/gene="psi"
/product="pbs-gag"

HIV-PSI

Start: 697 End: 806

HR-ePSI

Start: 807 End: 1144

RRE

Start: 1303 End: 1536
Rev Responsive Element
Original Location Description:
1303..1536
Qualifiers:
/gene="rre"
/product="minimal RRE"

HIV cpPu (Trip)

Start: 2034 End: 2211
Central Poly Purine Track
Original Location Description:
2034..2211
Qualifiers:
/gene="cppt"

WPRE

Start: 5173 End: 5764
Woodchuck Hepatitis Virus Posttranscriptional Regulatory Element
Original Location Description:
3563..4154
Qualifiers:
/gene="WPRE"

HIV nef

Start: 5770 End: 5858
HIV nef

dU3 LTR

Start: 5835 End: 6070
Deleted U3 Long-Terminal Repeat
Original Location Description:
4225..4460
Qualifiers:
/gene="dU3 LTR"

HIV R

Start: 5872 End: 5987
HIV Repeat Region

HIV U5

Start: 5988 End: 6070
HIV U5

3' Flank

Start: 6071 End: 6141
Chromosomal 3' Flanking Sequence carried over from original HIV integration site

SV40 ori

Start: 8236 End: 8359
Original Location Description:
7991..8114
Qualifiers:
/gene="SV40 ori"

Modified Base (1 total)

Difference from 5' LTR

Start: 5883 End: 5883
This T is a C in the 5' LTR

Primer Binding Site (31 total)

pHAGE-A0050-8050

Start: 158 End: 179 (Complementary)

pHAGE-S501-1000

Start: 401 End: 421

pHAGE-A0550-0050

Start: 667 End: 690 (Complementary)

pHAGE-S1001-1500

Start: 898 End: 919

pHAGE-A1050-0550

Start: 1166 End: 1189 (Complementary)

pHAGE-S1501-2000

Start: 1391 End: 1417

pHAGE-A1550-1050

Start: 1650 End: 1678 (Complementary)

pHAGE-S2001-2500

Start: 1898 End: 1922

pHAGE-A2050-1550

Start: 2084 End: 2112 (Complementary)

pHAGE 5' IRES

Start: 3903 End: 3923

pHAGE 3' CDS 1-1 (Binds IRES)

Start: 3911 End: 3931 (Complementary)

pHAGE 5' CDS 2-1 Start (Binds IRES)

Start: 4167 End: 4185

pHAGE 3' CDS 1-2 (Binds IRES)

Start: 4167 End: 4185 (Complementary)

pHAGE 5' CDS 2-2 (Binds IRES)

Start: 4441 End: 4464

pHAGE 3' IRES

Start: 4443 End: 4464 (Complementary)

pHAGE 3' CDS

Start: 5201 End: 5235 (Complementary)

pHAGE-A3550-3050

Start: 5279 End: 5302 (Complementary)

pHAGE-S4001-4500

Start: 5432 End: 5452

pHAGE-A4050-3550

Start: 5760 End: 5782 (Complementary)

pHAGE-S4501-5000

Start: 6068 End: 6099

pHAGE-S6001-6500

Start: 6174 End: 6196

pHAGE-A6050-5550

Start: 6447 End: 6470 (Complementary)

pHAGE-S6501-7000

Start: 6647 End: 6671

pHAGE-A6550-6050

Start: 6916 End: 6939 (Complementary)

pHAGE-S7001-7500

Start: 7167 End: 7191

pHAGE-A7050-6550

Start: 7427 End: 7448 (Complementary)

pHAGE-S7501-8000

Start: 7671 End: 7695

pHAGE-A7550-7050

Start: 7938 End: 7959 (Complementary)

pHAGE-S8001-8500

Start: 8174 End: 8193

pHAGE-A8050-7550

Start: 8414 End: 8440 (Complementary)

pHAGE-S1-500

Start: 8679 End: 8707

Promoter Eukaryotic (1 total)

UBCp

Start: 2218 End: 2615
Ubiquitin C Promoter

Promoter Prokaryotic (1 total)

P-Bla

Start: 6345 End: 6379
Beta Lactamase Promoter

Replication Origin (1 total)

ORI

Start: 7466 End: 7999
Bacterial Origin of Replication
Original Location Description:
7221..7754

Qualifiers:
/gene="ORI"
/product="ColE1 origin of replication"

Misc. Structure (1 total)

IRES

Start: 3887 End: 4464

Restriction/Methylation Map

Enzyme	# of cuts	Positions
Acc65I	1	4320
AflII	2	518 5954
ApaLI	4	4356 5384 6496 7742
AvaI	4	296 1928 3780 6143
BamHI	1	2699
BclI	2	2744 4548
BglII	4	474 5803 5869 5910
BsrGI	1	5016
ClaI	1	5163
DraI	7	2062 3266 5820 6590 7282 7301 8742
EagI	3	1145 1149 2618
EcoRI	1	2029
EcoRV	4	36 115 334 3506
EgeI	4	640 2240 2253 4771
FseI	1	1151
FspI	1	6945
HindIII	5	532 1088 1676 4103 5968
KpnI	1	4324
MscI	1	4457
NaeI	3	1149 4732 5689
NdeI	1	4464
NotI	1	2618
PacI	1	6153
PmlI	3	291 3323 4195
PvuI	1	6799
PvuII	5	436 2816 3029 3406 5798
SacI	3	492 683 5928
SacII	2	2249 5678
SalI	1	4703
SfiI	1	8288
SmaI	1	6145
SpeI	1	2213
StuI	2	2665 8334
XmaI	1	6143

No cuts: AscI, HpaI, MluI, NcoI, NheI, PmeI, PstI, SbfI, SdaI, SrfI, SwaI, XbaI, XcmI, XhoI

Sequence

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Component Fragments