



LOCUS pHAGE\hSPC 10592 bp DNA circular 4-JAN-2012
 SOURCE
 ORGANISM
 COMMENT 7/27/09: SJO: pHAGE hSPC-dsRed-W lentiviral vector:
 cloned dsRed after SPC by swapping out GFP from pHAGE hSPC-GFP-W as follows:
 cut parental BB (pHAGE hSPC-GFP-W) Not1/BamH1.
 (parental vector made by Annie Dowton 2008 by cloning in Whitsett labs human 3.7 kb hSPC
 promoter fragment.
 dsRed express released from CMV-dsRed-W lenti (Not1/BamH1 cutting), ligated into
 position after hSPC promoter, both Not1 and BamH1 junctions and entire dsRed insert
 confirmed as perfect
 by sequencing (SJO; clone 1 perfect).
 COMMENT This file is created by Vector NTI
 <http://www.informaxinc.com/>
 COMMENT VNTDATE|524724565|
 COMMENT VNTDBDATE|614163454|
 COMMENT LSOWNER|
 COMMENT VNTNAME|pHAGE hSPC-dsRed Express-W|
 COMMENT VNTAUTHORNAME|Darrell Kotton|
 COMMENT VNTAUTHOREML|dkotton@bu.edu|
 FEATURES Location/Qualifiers
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 /vntifkey="21"
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 /note="Long Terminal Repeat"
 misc_feature 637..1155
 /gene="psi"
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 /vntifkey="21"
 /label=PSI
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 /label=RRE
 /note="Rev Responsive Element"

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              /note="Woodchuck Hepatitis Virus Posttranscriptional Regulatory Element"
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              /gene="dU3 LTR"
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              /note="Deleted U3 Long-Terminal Repeat"
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              /gene="AMPr"
              /product="beta-lactamase (mature form)"
              /vntifkey="4"
              /label=AMPr
              /note="Ampicillin Resistance Gene"
rep_origin  9274..9807
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              /product="ColE1 origin of replication"
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              /vntifkey="28"
              /label=pHAGE-S501-1000
primer_bind 898..919

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            1898..1922
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            /label=pHAGE-S4001-4500
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misc_feature      807..1144
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misc_feature      1..453
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BASE COUNT      2755 a      2545 c      2934 g      2358 t

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ORIGIN

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9841 gccttttgct ggccttttgc tcacatgttc tttcctgcgt tatcccctga ttctgtggat
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10561 atttgttaaa tatgtactac aaacttagta gt

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AatII (3)	gacgtc	6318, 7437, 8058
AhdI (3)	gacnnnnngtc	3061, 6482, 8981
ApaBI (3)	gcannnnntgc	1458, 5508, 5745
ApaLI (3)	gtgcac	7197, 8309, 9555
Asel (3)	attaat	8805, 10040, 10222
BcgI (3)	cgannnnntgc	4989, 8460, 4223
BciVI (3)	gatatc	7063, 8133, 9660
BsmI (3)	gaatgc	3541, 10377, 1594
BsrBI (3)	ccgctc	10302, 8137, 9938
BsrDI (3)	gcaatg	7236, 8922, 8740
BsrFI (3)	rccggy	1152, 7500, 8896
BstAPI (3)	gcannnnntgc	1458, 5508, 5745
EcoRV (3)	gatatc	39, 118, 337
FspI (3)	tgcgca	2294, 6349, 8756
M.AvaI (3)	rccggy	1152, 7500, 8896
M.BcgI (3)	cgannnnntgc	4989, 8460, 4223
M.Cfr10I (3)	rccggy	1152, 7500, 8896
M.EcoRV (3)	gatatc	39, 118, 337
M.MunI (3)	caattg	1195, 3365, 5513
M.StyLTIII (3)	gagnnnnnrtayg	8477, 1184, 10002
M.VspI (3)	attaat	8805, 10040, 10222
M.XbaI (3)	tctaga	5360, 5823, 6257
MfeI (3)	caattg	1195, 3365, 5513
PfIMI (3)	ccannnnntgg	3484, 6820, 7228

Ppil (3)	gaacnnnnnctc	9178, 6689, 8335
SanDI (3)	gggwccc	1940, 3181, 4211
SphI (3)	gcatgc	3294, 4904, 5000
StuI (3)	aggcct	5092, 6733, 10145
XbaI (3)	tctaga	5360, 5823, 6257
ZraI (3)	gacgtc	6318, 7437, 8058
Acc65I (2)	ggtacc	5632, 6276
AclI (2)	aacgtt	8378, 8751
AleI (2)	cacnnnngtg	1583, 6930
AvrII (2)	cctagg	4474, 10148
BbeI (2)	ggcgcc	643, 2273
BpII (2)	gagnnnnnctc	686, 10097
BssHII (2)	gcgcbc	717, 6947
BstEII (2)	ggtnacc	6444, 6615
DrallI (2)	cacnnngtg	216, 5385
EagI (2)	cggccg	1150, 6295
KasI (2)	ggcgcc	643, 2273
KpnI (2)	ggtacc	5632, 6276
M.AclI (2)	aacgtt	8378, 8751
M.Cfr9I (2)	cccggg	6272, 7956
M.DrallI (2)	cacnnngtg	216, 5385
M.EcaI (2)	ggtnacc	6444, 6615
M.EcoAI (2)	gagnnnnnnngtca	2532, 3558
M.EcoBI (2)	tgannnnnnntgct	7890, 2708
M.KpnI (2)	ggtacc	5632, 6276
M.NgoMIV (2)	gccggc	1152, 7500
M.SauLPI (2)	gccggc	1152, 7500
M.SmaI (2)	cccggg	6272, 7956
M.Tth111I (2)	gacnnngtc	3705, 5029
M.XcyI (2)	cccggg	6272, 7956
M.XmalII (2)	cggccg	1150, 6295
NaeI (2)	gccggc	1152, 7500
NarI (2)	ggcgcc	643, 2273
NcoI (2)	ccatgg	5959, 6301
NgoMIV (2)	gccggc	1152, 7500
PmlI (2)	cacgtg	294, 4174
PvuI (2)	cgatcg	2314, 8609
SapI (2)	gctcttc	1114, 9992
SbfI (2)	cctgcagg	6246, 6640
SfiI (2)	ggccnnnnnggcc	6303, 10101

SfoI (2)	ggcgcc	643, 2273
SmaI (2)	cccggg	6272, 7956
Sse8647I (2)	aggwcct	3085, 3875
Sspl (2)	aatatt	4509, 8174
Tth111I (2)	gacnnngtc	3705, 5029
UthSI (2)	cccggg	6272, 7956
XmaI (2)	cccggg	6272, 7956
XmnI (2)	gaannnttc	850, 8381
AflIII (1)	acrygt	9869
Alol (1)	gaacnnnnntcc	6690
BamHI (1)	ggatcc	6981
BsaBI (1)	gatnnnatc	6986
BspEI (1)	tccgga	314
Bsu36I (1)	cctnagg	4046
Clal (1)	atcgat	6265
DrdI (1)	gacnnnnngtc	9767
EcoRI (1)	gaattc	2034
FseI (1)	ggccggcc	1153
FspAI (1)	rtgcgcay	6350
M.AflIII (1)	acrygt	9869
M.Alol (1)	gaacnnnnntcc	6690
M.BnaI (1)	ggatcc	6981
M.BseCI (1)	atcgat	6265
M.Bsp106I (1)	atcgat	6265
M.BstI (1)	ggatcc	6981
M.Bsu15I (1)	atcgat	6265
M.Clal (1)	atcgat	6265
M.EcoKI (1)	aacnnnnngtgc	8318
M.EcoRI (1)	gaattc	2034
M.KpnAI (1)	gaannnnntgcc	1897
M.KpnBI (1)	caaannnnnrta	5335
M.PshAI (1)	gacnnngtc	6205
M.Rrh4273I (1)	gtcgac	6251
M.RsrI (1)	gaattc	2034
M.SalI (1)	gtcgac	6251
M.SsoI (1)	gaattc	2034
M.StySPI (1)	aacnnnnngtrc	8318
M.XcmI (1)	ccannnnnnntgg	3408
NotI (1)	gcggccgc	6296
NruI (1)	tcgca	837

Pacl (1)	ttaattaa	7964
Pcil (1)	acatgt	9869
PshAI (1)	gacnnnngtc	6205
Psil (1)	ttataa	7917
SaclI (1)	ccgcgg	7488
Sall (1)	gtcgac	6251
SexAI (1)	accwgggt	6821
SpeI (1)	actagt	2218
Xcml (1)	ccannnnnnntgg	3408