



LOCUS pHAGE\NFkB 8772 bp DNA circular 30-JUL-2012

SOURCE

ORGANISM

COMMENT This file is created by Vector NTI
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COMMENT ORIGDB|GenBank

COMMENT VNTDATE|404221946|

COMMENT VNTDBDATE|633009613|

COMMENT LSOWNER|

COMMENT VNTNAME|pHAGE NFkB-TA-luc-UBC-GFP-W|

FEATURES Location/Qualifiers

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ORIGIN

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AccIII (3)	tccgga	314, 3064, 3580
Alw44I (3)	gtgcac	5377, 6489, 7735
Aor13HI (3)	tccgga	314, 3064, 3580
ApaLI (3)	gtgcac	5377, 6489, 7735
Asel (3)	attaat	6985, 8220, 8402
AsnI (3)	attaat	6985, 8220, 8402
AssI (3)	agtact	319, 2532, 6678
BbvAIII (3)	tccgga	314, 3064, 3580
BcgI (3)	cgannnnntgc	6640, 3900, 4542
Bli736I (3)	gtctc	461, 5885, 7089
BpII (3)	gagnnnnnctc	686, 3980, 8277
BpoAI (3)	attaat	6985, 8220, 8402
BsaI (3)	gtctc	461, 5885, 7089
Bse3DI (3)	gcaatg	5416, 7102, 6920
BseAI (3)	tccgga	314, 3064, 3580
BseMI (3)	gcaatg	5416, 7102, 6920
BseYI (3)	cccagc	366, 3511, 7745
BsiMI (3)	tccgga	314, 3064, 3580
Bso31I (3)	gtctc	461, 5885, 7089
Bsp13I (3)	tccgga	314, 3064, 3580
BspEI (3)	tccgga	314, 3064, 3580
BspMII (3)	tccgga	314, 3064, 3580
BspTNI (3)	gtctc	461, 5885, 7089
BsrDI (3)	gcaatg	5416, 7102, 6920
Bsu23I (3)	tccgga	314, 3064, 3580

CauB3I (3)	tccgga	314, 3064, 3580
CeqI (3)	gatatc	39, 118, 337
Dpal (3)	agtact	319, 2532, 6678
Drall (3)	rggnccy	1940, 3548, 6181
Ecl136II (3)	gagctc	493, 684, 5917
Eco255I (3)	agtact	319, 2532, 6678
Eco31I (3)	ggtctc	461, 5885, 7089
Eco32I (3)	gatatc	39, 118, 337
Eco53kl (3)	gagctc	493, 684, 5917
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EcoICRI (3)	gagctc	493, 684, 5917
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EcoO44I (3)	ggtctc	461, 5885, 7089
EcoRV (3)	gatatc	39, 118, 337
Hjal (3)	gatatc	39, 118, 337
HpyCI (3)	gatatc	39, 118, 337
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Kpn2I (3)	tccgga	314, 3064, 3580
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M.EcoRV (3)	gatatc	39, 118, 337
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M.SacI (3)	gagctc	493, 684, 5917
M.ScaI (3)	agtact	319, 2532, 6678
M.StyLTIII (3)	gagnnnnnnrtayg	6657, 1184, 8182
M.VspI (3)	attaat	6985, 8220, 8402
Mfel (3)	caattg	1195, 2484, 2940
MroI (3)	tccgga	314, 3064, 3580
MunI (3)	caattg	1195, 2484, 2940
MxaI (3)	gagctc	493, 684, 5917

NsiCI (3)	gatatc	39, 118, 337
PinBII (3)	tccgga	314, 3064, 3580
PshBI (3)	attaat	6985, 8220, 8402
Psp124BI (3)	gagctc	493, 684, 5917
Pssl (3)	rggnccy	1940, 3548, 6181
Ptal (3)	tccgga	314, 3064, 3580
RfIFII (3)	agtact	319, 2532, 6678
SacI (3)	gagctc	493, 684, 5917
SapI (3)	gctcttc	1114, 3177, 8172
Scal (3)	agtact	319, 2532, 6678
Snol (3)	gtgcac	5377, 6489, 7735
Sru4DI (3)	attaat	6985, 8220, 8402
SstI (3)	gagctc	493, 684, 5917
TaqII (3)	gaccga	6639, 6798, 8137
VneI (3)	gtgcac	5377, 6489, 7735
VpaK32I (3)	gctcttc	1114, 3177, 8172
VspI (3)	attaat	6985, 8220, 8402
AasI (2)	gacnnnnngtc	3770, 7947
AatII (2)	gacgtc	5617, 6238
AauI (2)	tgtaca	2859, 5144
Acc36I (2)	acctgc	3767, 3776
Accl (2)	gtmkac	967, 2113
AclI (2)	aacgtt	6558, 6931
AfIII (2)	cttaag	523, 5947
AfIII (2)	acrygt	2862, 8049
Asp700 (2)	gaannnttc	850, 6561
Asp700I (2)	gaannnttc	850, 6561
BavAI (2)	cagctg	439, 5789
BavBI (2)	cagctg	439, 5789
BavI (2)	cagctg	439, 5789
BbvAI (2)	gaannnttc	850, 6561
BfrI (2)	cttaag	523, 5947
BfuAI (2)	acctgc	3767, 3776

BglI (2)	gccnnnnnggc	7042, 8280
Bsp1407I (2)	tgtaca	2859, 5144
Bsp153AI (2)	cagctg	439, 5789
BspAAlI (2)	tctaga	2267, 2274
BspM39I (2)	cagctg	439, 5789
BspMI (2)	acctgc	3767, 3776
BspO4I (2)	cagctg	439, 5789
BspTI (2)	cttaag	523, 5947
BsrGI (2)	tgtaca	2859, 5144
Bst98I (2)	cttaag	523, 5947
BstNSI (2)	rcatgy	3028, 8049
BstPZ740I (2)	cttaag	523, 5947
CcoI (2)	gccggc	1152, 5680
Cfr42I (2)	ccgcg	4055, 5668
Cfr6I (2)	cagctg	439, 5789
Cscl (2)	ccgcg	4055, 5668
Dmal (2)	cagctg	439, 5789
DrdI (2)	gacnnnnngtc	3770, 7947
DseDI (2)	gacnnnnngtc	3770, 7947
Eae46I (2)	ccgcg	4055, 5668
EclI (2)	cagctg	439, 5789
Eco29kI (2)	ccgcg	4055, 5668
Eco56I (2)	gccggc	1152, 5680
EcoRI (2)	gaattc	2034, 2299
Esp4I (2)	cttaag	523, 5947
FblI (2)	gtmkac	967, 2113
FunII (2)	gaattc	2034, 2299
Gall (2)	ccgcg	4055, 5668
GceGLI (2)	ccgcg	4055, 5668
GceI (2)	ccgcg	4055, 5668
Hall (2)	gaattc	2034, 2299
HincII (2)	gtyrac	3671, 6617
HindII (2)	gtyrac	3671, 6617

HinJCI (2)	gtyrac	3671, 6617
Kpn378I (2)	ccgcg	4055, 5668
Kpn49kI (2)	gaattc	2034, 2299
KspI (2)	ccgcg	4055, 5668
M.Accl (2)	gtmkac	967, 2113
M.AclI (2)	aacgtt	6558, 6931
M.AfIII (2)	acrygt	2862, 8049
M.Cfr6I (2)	cagctg	439, 5789
M.EcoR124II (2)	gaannnnnnnrtcg	2864, 4997
M.EcoRI (2)	gaattc	2034, 2299
M.HincII (2)	gtyrac	3671, 6617
M.HindII (2)	gtyrac	3671, 6617
M.KpnAI (2)	gaannnnntgcc	1897, 4237
M.NgoMIV (2)	gccggc	1152, 5680
M.NspHI (2)	rcatgy	3028, 8049
M.NspI (2)	rcatgy	3028, 8049
M.PvuII (2)	cagctg	439, 5789
M.RsrI (2)	gaattc	2034, 2299
M.SauLPI (2)	gccggc	1152, 5680
M.SsoI (2)	gaattc	2034, 2299
M.XbaI (2)	tctaga	2267, 2274
MroNI (2)	gccggc	1152, 5680
MroXI (2)	gaannnttc	850, 6561
MspCI (2)	cttaag	523, 5947
NaeI (2)	gccggc	1152, 5680
NgoAIII (2)	ccgcg	4055, 5668
NgoAIV (2)	gccggc	1152, 5680
NgoMI (2)	gccggc	1152, 5680
NgoMIV (2)	gccggc	1152, 5680
NgoPIII (2)	ccgcg	4055, 5668
NmeRI (2)	cagctg	439, 5789
NspHI (2)	rcatgy	3028, 8049
NspI (2)	rcatgy	3028, 8049

Pae14kl (2)	ccgcfg	4055, 5668
Pae17kl (2)	cagctg	439, 5789
Pae5kl (2)	ccgcfg	4055, 5668
PaeAI (2)	ccgcfg	4055, 5668
PaeQI (2)	ccgcfg	4055, 5668
PauAI (2)	rcatgy	3028, 8049
Pdil (2)	gccggc	1152, 5680
Pdml (2)	gaannnttc	850, 6561
Pfl27I (2)	rggwccy	1940, 3548
Ppu111I (2)	gaattc	2034, 2299
PpuMI (2)	rggwccy	1940, 3548
PpuXI (2)	rggwccy	1940, 3548
Psil (2)	ttataa	2692, 6097
Psp1406I (2)	aacgtt	6558, 6931
Psp5II (2)	rggwccy	1940, 3548
PspPPI (2)	rggwccy	1940, 3548
Pun14627II (2)	cagctg	439, 5789
PunAll (2)	rcatgy	3028, 8049
Pvu84II (2)	cagctg	439, 5789
Pvull (2)	cagctg	439, 5789
Rsrl (2)	gaattc	2034, 2299
SacII (2)	ccgcfg	4055, 5668
SauBMKI (2)	gccggc	1152, 5680
SauHPI (2)	gccggc	1152, 5680
SauLPI (2)	gccggc	1152, 5680
SauNI (2)	gccggc	1152, 5680
SauSI (2)	gccggc	1152, 5680
ScellI (2)	gccggc	1152, 5680
SchZI (2)	ccgcfg	4055, 5668
SenPT14bl (2)	ccgcfg	4055, 5668
SexBI (2)	ccgcfg	4055, 5668
SexCI (2)	ccgcfg	4055, 5668
Sfr303I (2)	ccgcfg	4055, 5668

SgrBI (2)	ccgcg	4055, 5668
Slu1777I (2)	gccggc	1152, 5680
Spul (2)	ccgcg	4055, 5668
Srl32DII (2)	gaattc	2034, 2299
SrII (2)	gccggc	1152, 5680
Ssol (2)	gaattc	2034, 2299
Ssp4800I (2)	tgtaca	2859, 5144
Ssp5230I (2)	gacgtc	5617, 6238
SspBI (2)	tgtaca	2859, 5144
SstII (2)	ccgcg	4055, 5668
Tsp8EI (2)	gccnnnnnggc	7042, 8280
Vha464I (2)	cttaag	523, 5947
XbaI (2)	tctaga	2267, 2274
XceI (2)	rcatgy	3028, 8049
XmiI (2)	gtmkac	967, 2113
Xmnl (2)	gaannnttc	850, 6561
ZraI (2)	gacgtc	5617, 6238
AaI (1)	cggccg	1150
AagI (1)	atcgat	5155
AarI (1)	cacctgc	3768
AatI (1)	aggcct	8325
Abal (1)	tgatca	2949
Abel (1)	cctcagc	1430
Acc16I (1)	tgcgca	6936
AccB7I (1)	ccannnnntgg	5408
AccEBI (1)	ggatcc	4022
AcI NI (1)	actagt	2218
Acpl (1)	ttcgaa	2537
AcplI (1)	ccannnnntgg	5408
AcvI (1)	cacgtg	294
Adel (1)	cacnnngtg	216
Afa16RI (1)	cgatcg	6789
Afa22MI (1)	cgatcg	6789

AfeI (1)	agcgct	4081
AhdI (1)	gacnnnnngtc	7161
AhII (1)	actagt	2218
AhyI (1)	cccggg	6136
AitI (1)	agcgct	4081
Alil (1)	ggatcc	4022
Aor51HI (1)	agcgct	4081
Aosl (1)	tgcgca	6936
ApaBI (1)	gcannnnntgc	1458
ApaCI (1)	ggatcc	4022
Asil (1)	ggatcc	4022
Asp10HI (1)	ttcgaa	2537
Asp10HII (1)	ccannnnntgg	5408
AspEI (1)	gacnnnnngtc	7161
AspMI (1)	aggcct	8325
AsuII (1)	ttcgaa	2537
Avill (1)	tgcgca	6936
AvrBII (1)	cctagg	8328
AvrII (1)	cctagg	8328
BaeI (1)	acnnnngtayc	4184
BamHI (1)	ggatcc	4022
BanIII (1)	atcgat	5155
BasI (1)	ccannnnntgg	5408
BbrPI (1)	cacgtg	294
BbuI (1)	gcatgc	3028
BbvAII (1)	atcgat	5155
BbvCI (1)	cctcagc	1430
Bce751I (1)	ggatcc	4022
Bci29I (1)	atcgat	5155
BciBI (1)	atcgat	5155
BclI (1)	tgatca	2949
Bcml (1)	atcgat	5155
BcoAI (1)	cacgtg	294

BcuI (1)	actagt	2218
BdII (1)	atcgat	5155
Bim19I (1)	ttcgaa	2537
BimI (1)	ttcgaa	2537
Bli41I (1)	atcgat	5155
Bli86I (1)	atcgat	5155
BliRI (1)	atcgat	5155
BlnI (1)	cctagg	8328
BmgBI (1)	cacgtc	4089
BnaI (1)	ggatcc	4022
Bpu14I (1)	ttcgaa	2537
Bsa29I (1)	atcgat	5155
BsaAI (1)	yacgtr	294
BsaBI (1)	gatnnnnatc	5166
Bscl (1)	atcgat	5155
Bse8I (1)	gatnnnnatc	5166
BseCI (1)	atcgat	5155
BseJI (1)	gatnnnnatc	5166
BsePI (1)	gcgcgc	717
BseX3I (1)	cggccg	1150
Bsh1365I (1)	gatnnnnatc	5166
BsiBI (1)	gatnnnnatc	5166
BsiCI (1)	ttcgaa	2537
BsiQI (1)	tgatca	2949
BsiXI (1)	atcgat	5155
Bsp106I (1)	atcgat	5155
Bsp119I (1)	ttcgaa	2537
Bsp19I (1)	ccatgg	2367
Bsp4009I (1)	ggatcc	4022
Bsp68I (1)	tcgcga	837
Bsp98I (1)	ggatcc	4022
BspA2I (1)	cctagg	8328
BspAIII (1)	ggatcc	4022

BspCI (1)	cgatcg	6789
BspDI (1)	atcgat	5155
BspJII (1)	atcgat	5155
BspLAI (1)	ttcgaa	2537
BspLU11I (1)	acatgt	8049
BspOVI (1)	gacnnnnngtc	7161
BspOVII (1)	atcgat	5155
BspT104I (1)	ttcgaa	2537
BspXI (1)	atcgat	5155
BspXII (1)	tgatca	2949
BspZEI (1)	atcgat	5155
BsrBRI (1)	gatnnnnatc	5166
BssHII (1)	gcgcgc	717
Bst28I (1)	atcgat	5155
BstAPI (1)	gcannnnntgc	1458
BstBAI (1)	yacgtr	294
BstBI (1)	ttcgaa	2537
BstBZ153I (1)	gcgcgc	717
BstI (1)	ggatcc	4022
BstI316I (1)	cacnnngtg	216
BstNZ169I (1)	atcgat	5155
BstT7I (1)	tgatca	2949
BstZI (1)	cggccg	1150
Bsu15I (1)	atcgat	5155
BsuTUI (1)	atcgat	5155
BtrI (1)	cacgtc	4089
Cbil (1)	ttcgaa	2537
Cell (1)	ggatcc	4022
Cfr9I (1)	cccggg	6136
CfrJ4I (1)	cccggg	6136
Clal (1)	atcgat	5155
Csp45I (1)	ttcgaa	2537
Csp68KII (1)	ttcgaa	2537

DrallI (1)	cacnngtg	216
EaeAI (1)	cccggg	6136
EagBI (1)	cgatcg	6789
EagI (1)	cggccg	1150
Eam1105I (1)	gacnnnnngtc	7161
EclHKL (1)	gacnnnnngtc	7161
EclRI (1)	cccggg	6136
EclXI (1)	cggccg	1150
Eco147I (1)	aggcct	8325
Eco47III (1)	agcgct	4081
Eco52I (1)	cggccg	1150
Eco72I (1)	cacgtg	294
ErhB9I (1)	cgatcg	6789
Esp1396I (1)	ccannnnntgg	5408
FauNDI (1)	catatg	4432
FbaI (1)	tgatca	2949
FdIII (1)	tgcgca	6936
FseI (1)	ggccggcc	1153
FspI (1)	tgcgca	6936
FspII (1)	ttcgaa	2537
FunI (1)	agcgct	4081
Gdil (1)	aggcct	8325
GstI (1)	ggatcc	4022
Ksp22I (1)	tgatca	2949
Lcal (1)	atcgat	5155
LplI (1)	atcgat	5155
Lspl (1)	ttcgaa	2537
M.BaeI (1)	acnnnngtayc	4184
M.BamHI (1)	ggatcc	4022
M.BbvCIA (1)	cctcagc	1430
M.BbvCIB (1)	cctcagc	1430
M.BclI (1)	tgatca	2949
M.BmeTI (1)	tgatca	2949

M.BnaI (1)	ggatcc	4022
M.BsaAI (1)	yacgtr	294
M.BseCI (1)	atcgat	5155
M.Bsp106I (1)	atcgat	5155
M.BstI (1)	ggatcc	4022
M.Bsu15I (1)	atcgat	5155
M.Cfr9I (1)	cccggg	6136
M.ClaI (1)	atcgat	5155
M.DraIII (1)	cacnngtg	216
M.EcoKI (1)	aacnnnnngtgc	6498
M.EcoR124I (1)	gaannnnnrtcg	3858
M.NgoAV (1)	gcannnnnnntgc	1425
M.SmaI (1)	cccggg	6136
M.StySPI (1)	aacnnnnngtrc	6498
M.TaeII (1)	tgatca	2949
M.XcmI (1)	ccannnnnnntgg	3106
M.XcyI (1)	cccggg	6136
M.XmaIII (1)	cggccg	1150
MamI (1)	gatnnnatc	5166
MlaI (1)	ttcgaa	2537
Mlu23I (1)	ggatcc	4022
MluB2I (1)	tcgca	837
MspYI (1)	yacgtr	294
MstI (1)	tgcgca	6936
MvrI (1)	cgatcg	6789
NbII (1)	cgatcg	6789
NcoI (1)	ccatgg	2367
NdeI (1)	catatg	4432
NruGI (1)	gacnnnnngtc	7161
Nrul (1)	tcgca	837
Nsbl (1)	tgcgca	6936
Nsp29132II (1)	ggatcc	4022
NspSAIV (1)	ggatcc	4022

NspV (1)	ttcgaa	2537
OkrAI (1)	ggatcc	4022
Pac25I (1)	cccggg	6136
Pacl (1)	ttaattaa	6144
PaeBI (1)	cccggg	6136
Pael (1)	gcatgc	3028
Paml (1)	tgcgca	6936
Paul (1)	gcgcbc	717
Pcel (1)	aggcct	8325
Pcil (1)	acatgt	8049
PfaAII (1)	catatg	4432
PfaAIII (1)	gcatgc	3028
Pfl8I (1)	ggatcc	4022
PfIBI (1)	ccannnnntgg	5408
PfIMI (1)	ccannnnntgg	5408
Pgal (1)	atcgat	5155
PlalI (1)	ttcgaa	2537
Ple19I (1)	cgatcg	6789
PmaCI (1)	cacgtg	294
Pme55I (1)	aggcct	8325
PmlI (1)	cacgtg	294
PpaAI (1)	ttcgaa	2537
PspAI (1)	cccggg	6136
PspALI (1)	cccggg	6136
Psu161I (1)	cgatcg	6789
PsuAI (1)	yacgtr	294
Pun14627I (1)	tgcgca	6936
Pvul (1)	cgatcg	6789
Rme21I (1)	atcgat	5155
RshI (1)	cgatcg	6789
RspLKI (1)	gcatgc	3028
RspLKII (1)	ggatcc	4022
SanDI (1)	gggwccc	1940

SarI (1)	aggcct	8325
Sbo13I (1)	tcgca	837
SdII (1)	ggccnnnnnggcc	8281
SenPT16I (1)	cggccg	1150
Sfil (1)	ggccnnnnnggcc	8281
Sful (1)	ttcgaa	2537
SgrAI (1)	crccggyg	3798
SmaI (1)	cccggg	6136
Soll (1)	ggatcc	4022
SpaHI (1)	gcatgc	3028
SpeI (1)	actagt	2218
SphI (1)	gcatgc	3028
Spol (1)	tcgca	837
Sru30DI (1)	aggcct	8325
Sse1825I (1)	gggwccc	1940
Sse8647I (1)	aggwcct	3548
SseBI (1)	aggcct	8325
Ssp1I (1)	ttcgaa	2537
Ssp27144I (1)	atcgat	5155
Sspl (1)	aatatt	6354
SspRFI (1)	ttcgaa	2537
Stel (1)	aggcct	8325
StuI (1)	aggcct	8325
Surl (1)	ggatcc	4022
SvII (1)	ttcgaa	2537
Van91I (1)	ccannnnntgg	5408
XcmI (1)	ccannnnnnntgg	3106
XcyI (1)	cccggg	6136
XmaCI (1)	cccggg	6136
XmaI (1)	cccggg	6136
XmaIII (1)	cggccg	1150
XmaJI (1)	cctagg	8328
XorII (1)	cgatcg	6789

ZhoI (1)	atcgat	5155
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