pHTS-CRE Molecule Information

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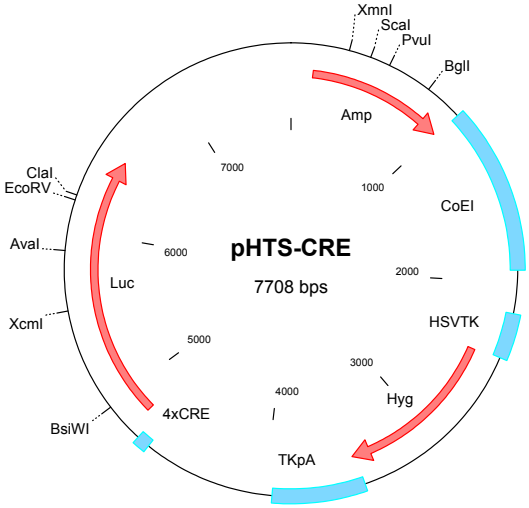
Molecule Features:

Features	Start	End
Ampicillin Resistance Gene	137	997
ColEI Replication Origin	1012	1930
HSV-TK Promoter	2167	2416
Hygromycin Resistance Gene	2430	3467
TK Polyadenylation Signal	3445	3957
Luciferase Gene	4828	6480
4 x CRE Enhancer Element	4688	4761

Vector Map



Nucleotide Sequence of pHTS-CRE

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   1  GACGTCAGGT GGCACTTTTC GGGGAAATGT GCGCGGAACC CCTATTTGTT TATTTTTCTA
  61  AATACATTCA AATATGTATC CGCTCATGAG ACAATAACCC TGATAAATGC TTCAATAATA
 121  TTGAAAAAGG AAGAGTATGA GTATTCAACA TTTCCGTGTC GCCCTTATTC CCTTTTTTGC
 181  GGCATTTTGC CTTCCTGTTT TTGCTCACCC AGAAACGCTG GTGAAAGTAA AAGATGCTGA
 241  AGATCAGTTG GGTGCACGAG TGGGTTACAT CGAACTGGAT CTCAACAGCG GTAAGATCCT
 301  TGAGAGTTTT CGCCCCGAAG AACGTTTTCC AATGATGAGC ACTTTTAAAG TTCTGCTATG
 361  TGGCGCGGTA TTATCCCGTA TTGACGCCGG GCAAGAGCAA CTCGGTCGCC GCATACACTA
 421  TTCTCAGAAT GACTTGGTTG AGTACTCACC AGTCACAGAA AAGCATCTTA CGGATGGCAT
 481  GACAGTAAGA GAATTATGCA GTGCTGCCAT AACCATGAGT GATAACACTG CGGCCAACTT
 541  ACTTCTGACA ACGATCGGAG GACCGAAGGA GCTAACCGCT TTTTTGCACA ACATGGGGGA
 601  TCATGTAACT CGCCTTGATC GTTGGGAACC GGAGCTGAAT GAAGCCATAC CAAACGACGA
 661  GCGTGACACC ACGATGCCTG TAGCAATGGC AACAACGTTG CGCAAACTAT TAACTGGCGA
 721  ACTACTTACT CTAGCTTCCC GGCAACAATT AATAGACTGG ATGGAGGCGG ATAAAGTTGC
 781  AGGACCACTT CTGCGCTCGG CCCTTCCGGC TGGCTGGTTT ATTGCTGATA AATCTGGAGC
 841  CGGTGAGCGT GGGTCTCGCG GTATCATTGC AGCACTGGGG CCAGATGGTA AGCCCTCCCG
 901  TATCGTAGTT ATCTACACGA CGGGGAGTCA GGCAACTATG GATGAACGAA ATAGACAGAT
 961  CGCTGAGATA GGTGCCTCAC TGATTAAGCA TTGGTAACTG TCAGACCAAG TTTACTCATA
1021  TATACTTTAG ATTGATTTAA AACTTCATTT TTAATTTAAA AGGATCTAGG TGAAGATCCT
1081  TTTTGATAAT CTCATGACCA AAATCCCTTA ACGTGAGTTT TCGTTCCACT GAGCGTCAGA
1141  CCCCGTAGAA AAGATCAAAG GATCTTCTTG AGATCCTTTT TTTCTGCGCG TAATCTGCTG
1201  CTTGCAAACA AAAAAACCAC CGCTACCAGC GGTGGTTTGT TTGCCGGATC AAGAGCTACC
1261  AACTCTTTTT CCGAAGGTAA CTGGCTTCAG CAGAGCGCAG ATACCAAATA CTGTCCTTCT
1321  AGTGTAGCCG TAGTTAGGCC ACCACTTCAA GAACTCTGTA GCACCGCCTA CATACCTCGC
1381  TCTGCTAATC CTGTTACCAG TGGCTGCTGC CAGTGGCGAT AAGTCGTGTC TTACCGGGTT
1441  GGACTCAAGA CGATAGTTAC CGGATAAGGC GCAGCGGTCG GGCTGAACGG GGGGTTCGTG
1501  CACACAGCCC AGCTTGGAGC GAACGACCTA CACCGAACTG AGATACCTAC AGCGTGAGCA
1561  TTGAGAAAGC GCCACGCTTC CCGAAGGGAG AAAGGCGGAC AGGTATCCGG TAAGCGGCAG
1621  GGTCGGAACA GGAGAGCGCA CGAGGGAGCT TCCAGGGGGA AACGCCTGGT ATCTTTATAG
1681  TCCTGTCGGG TTTCGCCACC TCTGACTTGA GCGTCGATTT TTGTGATGCT CGTCAGGGGG
1741  GCGGAGCTAT GGAAAAACGC CAGCAACGCG CCTTTTTACG GTTCCTGGCC TTTTGCTGGC
1801  CTTTTGCTCA CATGTTCTTT CCTGCGTTAT CCCTGATTCT GTGGATAACC GTATTACCGC
1861  CTTTGAGTGC TGATACCGCT CGCCGCAGCC GAACGACCGA GCGCAAGTCA GTGAGCGAGG
1921  AAGCGGAAGA GCGCCTGATG CGGTATTTTC TCCTTACGCA TCTGTGCGGT ATTTCACACC
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2041  CTGCTGGAGA TGGCGGACGC GATGGATATG TTCTGCCAAG GGTTGGTTTG CGCATTCACA
2101  GTTCTCCGCA AGAATTGATT GGCTCCAATT CTTGGAGTGG TGAATCCGTT AGCGAGGTGC
2161  CGCCGGGCTG CTTCATCCCC GTGGCCCGTT GCTCGCGTTT GCTGGCGGTG TCCCCGGAAG
2221  AAATATATTT GCATGTCTTT AGTTCTATGA TGACACAAAC CCCGCCCAGC GTCTTGTCAT
2281  TGGCGAATTC GAACACGCAG ATGCAGTCGG GGCGGCGCGG TCCCAGGTCC ACTTCGCATA
2341  TTAAGGTGAC GCGTGTGGCC TCGAACACCG AGCGACCCTG CAGCGACCCG CTTAACAGCG
2401  TCAACAGCGT GCCGCAAGAT CAGCTTGATA TGAAAAAGCC TGAACTCACC GCGACGTCTG
2461  TCGAGAAGTT TCTGATCGAA AAGTTCGACA GCGTCTCCGA CCTGATGCAG CTCTCGGAGG
2521  GCGAAGAATC TCGTGCTTTC AGCTTCGATG TAGGAGGGCG TGGATATGTC CTGCGGGTAA
2581  ATAGCTGCGC CGATGGTTTC TACAAAGATC GTTATGTTTA TCGGCACTTT GCATCGGCCG
2641  CGCTCCCGAT TCCGGAAGTG CTTGACATTG GGGAATTCAG CGAGAGCCTG ACCTATTGCA
2701  TCTCCCGCCG TGCACAGGGT GTCACGTTGC AAGACCTGCC TGAAACCGAA CTGCCCGCTG
2761  TTCTGCAGCC GGTCGCGGAG GCCATGGATG CGATCGCTGC GGCCGATCTT AGCCAGACGA
2821  GCGGGTTCGG CCCATTCGGA CCGCAAGGAA TCGGTCAATA CACTACATGG CGTGATTTCA
2881  TATGCGCGAT TGCTGATCCC CATGTGTATC ACTGGCAAAC TGTGATGGAC GACACCGTCA
2941  GTGCGTCCGT CGCGCAGGCT CTCGATGAGC TGATGCTTTG GGCCGAGGAC TGCCCCGAAG
3001  TCCGGCACCT CGTGCACGCG GATTTCGGCT CCAACAATGT CCTGACGGAC AATGGCCGCA
3061  TAACAGCGGT CATTGACTGG AGCGAGGCGA TGTTCGGGGA TTCCCAATAC GAGGTCGCCA
3121  ACATCTTCTT CTGGAGGCCG TGGTTGGCTT GTATGGAGCA GCAGACGCGC TACTTCGAGC
3181  GGAGGCATCC GGAGCTTGCA GGATCGCCGC GGCTCCGGGC GTATATGCTC CGCATTGGTC
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3241  TTGACCAACT CTATCAGAGC TTGGTTGACG GCAATTTCGA TGATGCAGCT TGGGCGCAGG
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3361  GCAGAAGCGC GGCCGTCTGG ACCGATGGCT GTGTAGAAGT ACTCGCCGAT AGTGGAAACC
3421  GACGCCCCAG CACTCGTGGG GATCGGGAGA TGGGGGAGGC TAACTGAAAC ACGGAAGGAG
3481  ACAATACCGG AAGGAACCCG CGCTATGACG GCAATAAAAA GACAGAATAA AACGCACGGG
3541  TGTTGGGTCG TTTGTTCATA AACGCGGGGT TCGGTCCCAG GGCTGGCACT CTGTCGATAC
3601  CCCACCGAGA CCCCATTGGG GCCAATACGC CCGCGTTTCT TCCTTTTCCC CACCCCAACC
3661  CCCAAGTTCG GGTGAAGGCC CAGGGCTCGC AGCCAACGTC GGGGCGGCAA GCCCGCCATA
3721  GCCACGGGCC CCGTGGGTTA GGGACGGGGT CCCCCATGGG GAATGGTTTA TGGTTCGTGG
3781  GGGTTATTCT TTTGGGCGTT GCGTGGGGTC AGGTCCACGA CTGGACTGAG CAGACAGACC
3841  CATGGTTTTT GGATGGCCTG GGCATGGACC GCATGTACTG GCGCGACACG AACACCGGGC
3901  GTCTGTGGCT GCCAAACACC CCCGACCCCC AAAAACCACC GCGCGGATTT CTGGCGCCAG
3961  TGCCAAGCTT GGGCTGCAGG TCGAGGAATT CCTTTGCCTA ATTTTATGGT GCACTCTCAG
4021  TACAATCTGC TCTGATGCCG CATAGTTAAG CCAGTATACA CTCCGCTATC GCTACGTGAC
4081  TGGGTCATGG CTGCGCCCCG ACACCCGCCA ACACCCGCTG ACGCGCCCTG ACGGGCTTGT
4141  CTGCTCCCGG CATCCGCTTA CAGACAAGCT GTGACCGTCT CCGGGAGCTG CATGTGTCAG
4201  AGGTTTTCAC CGTCATCACC GAAACGCGCG AGGCAGGATC AGCCATATCA CATTTGTAGA
4261  GGTTTTACTT GCTTTAAAAA ACCTCCCACA CCTCCCCCTG AACCTGAAAC ATAAAATGAA
4321  TGCAATTGTT GTTAACTTGT TTATTGCAGC TTATAATGGT TACAAATAAA GCAATAGCAT
4381  CACAAATTTC ACAAATAAAG CATTTTTCAC TGCATTCTAG TTGTGGTTTG TCCAAACTCA
4441  TCAATGTATC TTATCATGTC TGGATCAGCC ATATCACATT TGTAGAGGTT TTACTTGCTT
4501  TAAAAAACCT CCCACACCTC CCCCTGAACC TGAAACATAA AATGAATGCA ATTGTTGTTA
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4621  ATAAAGCAAT TTTTCACTGC ATTCTATTGT GGTTTGTCCA AACTCATCAA TGTATCTTAT
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4741  GAGAGCCTGA CGTCAGAGAG CGGAGACTCT AGAGGGTATA TAATGGAAGC TCGAATTCCA
4801  GCTTGGCATT CCGGTACTGT TGGTAAAATG GAAGACGCCA AAAACATAAA GAAAGGCCCG
4861  GCGCCATTCT ATCCTCTAGA GGATGGAACC GCTGGAGAGC AACTGCATAA GGCTATGAAG
4921  AGATACGCCC TGGTTCCTGG AACAATTGCT TTTACAGATG CACATATCGA GGTGAACATC
4981  ACGTACGCGG AATACTTCGA AATGTCCGTT CGGTTGGCAG AAGCTATGAA ACGATATGGG
5041  CTGAATACAA ATCACAGAAT CGTCGTATGC AGTGAAAACT CTCTTCAATT CTTTATGCCG
5101  GTGTTGGGCG CGTTATTTAT CGGAGTTGCA GTTGCGCCCG CGAACGACAT TTATAATGAA
5161  CGTGAATTGC TCAACAGTAT GAACATTTCG CAGCCTACCG TAGTGTTTGT TTCCAAAAAG
5221  GGGTTGCAAA AAATTTTGAA CGTGCAAAAA AAATTACCAA TAATCCAGAA AATTATTATC
5281  ATGGATTCTA AAACGGATTA CCAGGGATTT CAGTCGATGT ACACGTTCGT CACATCTCAT
5341  CTACCTCCCG GTTTTAATGA ATACGATTTT GTACCAGAGT CCTTTGATCG TGACAAAACA
5401  ATTGCACTGA TAATGAATTC CTCTGGATCT ACTGGGTTAC CTAAGGGTGT GGCCCTTCCG
5461  CATAGAACTG CCTGCGTCAG ATTCTCGCAT GCCAGAGATC CTATTTTTGG CAATCAAATC
5521  ATTCCGGATA CTGCGATTTT AAGTGTTGTT CCATTCCATC ACGGTTTTGG AATGTTTACT
5581  ACACTCGGAT ATTTGATATG TGGATTTCGA GTCGTCTTAA TGTATAGATT TGAAGAAGAG
5641  CTGTTTTTAC GATCCCTTCA GGATTACAAA ATTCAAAGTG CGTTGCTAGT ACCAACCCTA
5701  TTTTCATTCT TCGCCAAAAG CACTCTGATT GACAAATACG ATTTATCTAA TTTACACGAA
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5941  AAGGTTGTGG ATCTGGATAC CGGGAAAACG CTGGGCGTTA ATCAGAGAGG CGAATTATGT
6001  GTCAGAGGAC CTATGATTAT GTCCGGTTAT GTAAACAATC CGGAAGCGAC CAACGCCTTG
6061  ATTGACAAGG ATGGATGGCT ACATTCTGGA GACATAGCTT ACTGGGACGA AGACGAACAC
6121  TTCTTCATAG TTGACCGCTT GAAGTCTTTA ATTAAATACA AAGGATATCA GGTGGCCCCC
6181  GCTGAATTGG AATCGATATT GTTACAACAC CCCAACATCT TCGACGCGGG CGTGGCAGGT
6241  CTTCCCGACG ATGACGCCGG TGAACTTCCC GCCGCCGTTG TTGTTTTGGA GCACGGAAAG
6301  ACGATGACGG AAAAAGAGAT CGTGGATTAC GTCGCCAGTC AAGTAACAAC CGCGAAAAAG
6361  TTGCGCGGAG GAGTTGTGTT TGTGGACGAA GTACCGAAAG GTCTTACCGG AAAACTCGAC
6421  GCAAGAAAAA TCAGAGAGAT CCTCATAAAG GCCAAGAAGG GCGGAAAGTC CAAATTGTAA
6481  AATGTAACTG TATTCAGCGA TGACGAAATT CTTAGCTATT GTAATACTCT AGAGGATCTT
6541  TGTGAAGGAA CCTTACTTCT GTGGTGTGAC ATAATTGGAC AAACTACCTA CAGAGATTTA
6601  AAGCTCTAAG GTAAATATAA AATTTTTAAG TGTATAATGT GTTAAACTAC TGATTCTAAT
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6661  TGTTTGTGTA TTTTAGATTC CAACCTATGG AACTTATGAA TGGGAGCAGT GGTGGAATGC
6721  CTTTAATGAG GAAAACCTGT TTTGCTCAGA AGAAATGCCA TCTAGTGATG ATGAGGCTAC
6781  TGCTGACTCT CAACATTCTA CTCTCAAAAG AAGAGAAAGG TAGAGACCCA AGGACTTTCC
6841  TTCAGAATTG CTAAGTTTTT TGAGTCATGC TGTGTTTAGT AATAGAACTC TTGCTTGCTT
6901  TGCTATTTAC AACCACAAAG GAAAAAGCTG CACTGCTATA CAAGAAAATT ATGGAAAAAT
6961  ATTCTGTAAC CTTTATAAGT AGGCATAACA GTTATAATCA TAACATACTG TTTTTTCTTA
7021  CTCCACACAG GCATAGAGTG TCTGCTATTA ATAACTATGC TCAAAAATTG TGTACCTTTA
7081  GCTTTTTAAT TTGTAAAGGG GTTAATAAGG AATATTTGAT GTATAGTGCC TTGACTAGAG
7141  ATCATAATCA GCCATACCAC ATTTGTAGAG GTTTTACTTG CTTTAAAAAA CCTCCCACAC
7201  CTCCCCCTGA ACCTGAAACA TAAAATGAAT GCAATTGTTG TTGTTAACTT GTTTATTGCA
7261  GCTTATAATG GTTACAAATA AAGCAATAGC ATCACAAATT TCACAAATAA AGCATTTTTT
7321  TCACTGCATT CTAGTTGTGG TTTGTCCAAA CTCATCAATG TATCTTATCA TGTCTGGATC
7381  CCCAGGAAGC TCCTCTGTGT CCTCATAAAC CCTAACCTCC TCTACTTGAG AGGACATTCC
7441  AATCATAGGC TGCCCATCCA CCCTCTGTGT CCTCCTGTTA ATTAGGTCAC TTAACAAAAA
7501  GGAAATTGGG TAGGGGTTTT TCACAGACCG CTTTCTAAGG GGTAATTTTA AAATATCTGG
7561  GAAGTCCCTT CCACTGCTGT GTTCCAGAAG TGTTGGTAAA CAGCCCACAA ATGTCAACAG
7621  CAGAAACATA CAAGCTGTCA CTTTGCACAA AGGGCCTCGT GATACGCCTA TTTTTATAGG
7681  TTAATGTCAT GATAATAATG GTTTCTTA
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Restriction Map of pHTS-CRE

This list contains restriction enzymes cut four times or fewer.

Enzyme	#sites	Bp position of recognition site
AccI	1	4054
AflIII	3	1810, 2349, 5321
AhdI	1	919
AlwNI	1	1398
ApaI	1	3726
AvaI	2	2020, 5884
BamHI	2	4688, 7376
BanII	3	3683, 3726, 5848
BbeI	2	3953, 4860
BbsI	3	4831, 6109, 6239
BglI	1	800
BmrI	4	874, 4079, 5431, 6101
BsaAI	2	4073, 4980
BsaBI	1	7140
BsaI	3	852, 3607, 6823
BseRI	3	6368, 7390, 7417
BsgI	1	6928
BsiWI	1	4982
BsmBI	2	2492, 4176
BspHI	3	84, 1092, 7687
BspMI	3	2734, 3976, 6235
BsrDI	2	683, 865
BsrGI	1	5318
Bst1107I	1	4054
BstAPI	2	2729, 3005
BstBI	3	2288, 4996, 5784
BstEII	1	5435
Bsu36I	1	5440
Cfr10I	4	839, 2768, 5097, 6256
ClaI	1	6192
DraIII	2	2713, 3006
DrdI	4	1704, 2928, 3309, 4130
Eco52I	3	2635, 2800, 3370
Eco57I	4	237, 1285, 5656, 6840
EcoNI	1	6441
EcoO109I	4	3726, 3747, 6006, 7651
EcoRV	1	6164
EheI	2	3953, 4860
FspI	2	699, 2089
HaeII	4	1568, 1930, 3953, 4860
HindIII	1	3965
HpaI	3	4331, 4557, 7243
KasI	2	3953, 4860
MluI	1	2349
NarI	2	3953, 4860
NcoI	3	2782, 3754, 3840
NdeI	1	2879
NheI	1	4696
PacI	1	6148
PciI	1	1810
PpuMI	2	3747, 6006
PshAI	1	2453
Psp1406I	2	321, 694
PspOMI	1	3726
PstI	3	2378, 2763, 3974
PvuI	2	552, 2791
RsrII	1	2837
SacII	1	3207
SanDI	1	3747
SapI	2	1926, 5635
ScaI	2	441, 3398
SgfI	1	2790
SgrAI	1	6255
SphI	1	5487

SspI	3	117,	6958,	7111	
Tth111I	4	2487,	2931,	3743,	4078
Van91I	3	2076,	2125,	6680	
VspI	2	748,	7047		
XbaI	3	4768,	4875,	6528	
XcmI	2	3722,	5556		
XmnI	1	320			