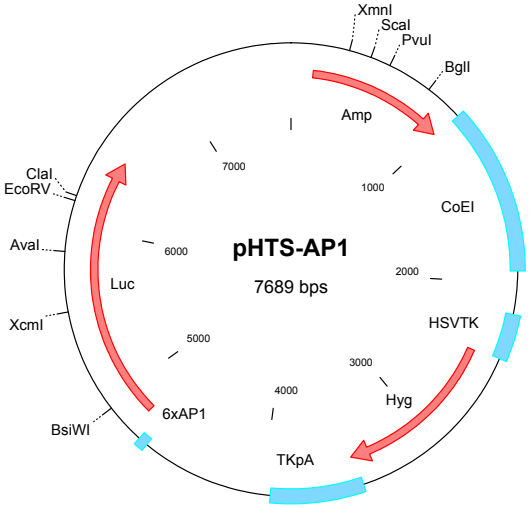
pHTS-AP1 Molecule Information

Contents

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	4809	6461
6 x AP1 Enhancer Element	4688	4741

Vector Map



Nucleotide Sequence of pHTS-AP1

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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
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1861  CTTTGAGTGC TGATACCGCT CGCCGCAGCC GAACGACCGA GCGCAAGTCA GTGAGCGAGG
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1981  GCATACGAAC GCCAGCAAGA CGTAGCCCAG CGCGTCGGCC CCGAGATGCG CCGCGTGCGG
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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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
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4681  CATGTCTGGA TCCAAGCTTG ACTAATGACT AATGACTAAT GACTAATGAC TAATGACTAA
4741  GCGGAGACTC TAGAGGGTAT ATAATGGAAG CTCGAATTCC AGCTTGGCAT TCCGGTACTG
4801  TTGGTAAAAT GGAAGACGCC AAAAACATAA AGAAAGGCCC GGCGCCATTC TATCCTCTAG
4861  AGGATGGAAC CGCTGGAGAG CAACTGCATA AGGCTATGAA GAGATACGCC CTGGTTCCTG
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4981  AAATGTCCGT TCGGTTGGCA GAAGCTATGA AACGATATGG GCTGAATACA AATCACAGAA
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5101  TCGGAGTTGC AGTTGCGCCC GCGAACGACA TTTATAATGA ACGTGAATTG CTCAACAGTA
5161  TGAACATTTC GCAGCCTACC GTAGTGTTTG TTTCCAAAAA GGGGTTGCAA AAAATTTTGA
5221  ACGTGCAAAA AAAATTACCA ATAATCCAGA AAATTATTAT CATGGATTCT AAAACGGATT
5281  ACCAGGGATT TCAGTCGATG TACACGTTCG TCACATCTCA TCTACCTCCC GGTTTTAATG
5341  AATACGATTT TGTACCAGAG TCCTTTGATC GTGACAAAAC AATTGCACTG ATAATGAATT
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5461  GATTCTCGCA TGCCAGAGAT CCTATTTTTG GCAATCAAAT CATTCCGGAT ACTGCGATTT
5521  TAAGTGTTGT TCCATTCCAT CACGGTTTTG GAATGTTTAC TACACTCGGA TATTTGATAT
5581  GTGGATTTCG AGTCGTCTTA ATGTATAGAT TTGAAGAAGA GCTGTTTTTA CGATCCCTTC
5641  AGGATTACAA AATTCAAAGT GCGTTGCTAG TACCAACCCT ATTTTCATTC TTCGCCAAAA
5701  GCACTCTGAT TGACAAATAC GATTTATCTA ATTTACACGA AATTGCTTCT GGGGGCGCAC
5761  CTCTTTCGAA AGAAGTCGGG GAAGCGGTTG CAAAACGCTT CCATCTTCCA GGGATACGAC
5821  AAGGATATGG GCTCACTGAG ACTACATCAG CTATTCTGAT TACACCCGAG GGGGATGATA
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6121  TGAAGTCTTT AATTAAATAC AAAGGATATC AGGTGGCCCC CGCTGAATTG GAATCGATAT
6181  TGTTACAACA CCCCAACATC TTCGACGCGG GCGTGGCAGG TCTTCCCGAC GATGACGCCG
6241  GTGAACTTCC CGCCGCCGTT GTTGTTTTGG AGCACGGAAA GACGATGACG GAAAAAGAGA
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6361  TTGTGGACGA AGTACCGAAA GGTCTTACCG GAAAACTCGA CGCAAGAAAA ATCAGAGAGA
6421  TCCTCATAAA GGCCAAGAAG GGCGGAAAGT CCAAATTGTA AAATGTAACT GTATTCAGCG
6481  ATGACGAAAT TCTTAGCTAT TGTAATACTC TAGAGGATCT TTGTGAAGGA ACCTTACTTC
6541  TGTGGTGTGA CATAATTGGA CAAACTACCT ACAGAGATTT AAAGCTCTAA GGTAAATATA
6601  AAATTTTTAA GTGTATAATG TGTTAAACTA CTGATTCTAA TTGTTTGTGT ATTTTAGATT
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6781  ACTCTCAAAA GAAGAGAAAG GTAGAGACCC AAGGACTTTC CTTCAGAATT GCTAAGTTTT
6841  TTGAGTCATG CTGTGTTTAG TAATAGAACT CTTGCTTGCT TTGCTATTTA CAACCACAAA
6901  GGAAAAAGCT GCACTGCTAT ACAAGAAAAT TATGGAAAAA TATTCTGTAA CCTTTATAAG
6961  TAGGCATAAC AGTTATAATC ATAACATACT GTTTTTTCTT ACTCCACACA GGCATAGAGT
7021  GTCTGCTATT AATAACTATG CTCAAAAATT GTGTACCTTT AGCTTTTTAA TTTGTAAAGG
7081  GGTTAATAAG GAATATTTGA TGTATAGTGC CTTGACTAGA GATCATAATC AGCCATACCA
7141  CATTTGTAGA GGTTTTACTT GCTTTAAAAA ACCTCCCACA CCTCCCCCTG AACCTGAAAC
7201  ATAAAATGAA TGCAATTGTT GTTGTTAACT TGTTTATTGC AGCTTATAAT GGTTACAAAT
7261  AAAGCAATAG CATCACAAAT TTCACAAATA AAGCATTTTT TTCACTGCAT TCTAGTTGTG
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7501  TTCACAGACC GCTTTCTAAG GGGTAATTTT AAAATATCTG GGAAGTCCCT TCCACTGCTG
7561  TGTTCCAGAA GTGTTGGTAA ACAGCCCACA AATGTCAACA GCAGAAACAT ACAAGCTGTC
7621  ACTTTGCACA AAGGGCCTCG TGATACGCCT ATTTTTATAG GTTAATGTCA TGATAATAAT
7681  GGTTTCTTA
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Restriction Map of pHTS-AP1

This list contains restriction enzymes cut four times or fewer.

Enzyme	#sites	Bp position of recognition site
AatII	2	1, 2453
AccI	1	4054
AflIII	3	1810, 2349, 5302
AhdI	1	919
AlwNI	1	1398
ApaI	1	3726
AvaI	2	2020, 5865
BamHI	2	4688, 7357
BanII	3	3683, 3726, 5829
BbeI	2	3953, 4841
BbsI	3	4812, 6090, 6220
BglI	1	800
BmrI	4	874, 4079, 5412, 6082
BsaAI	2	4073, 4961
BsaBI	1	7121
BsaI	3	852, 3607, 6804
BseRI	3	6349, 7371, 7398
BsgI	1	6909
BsiWI	1	4963
BsmBI	2	2492, 4176
BspHI	3	84, 1092, 7668
BspMI	3	2734, 3976, 6216
BsrBI	4	80, 1876, 2819, 3177
BsrDI	2	683, 865
BsrGI	1	5299
Bst1107I	1	4054
BstAPI	2	2729, 3005
BstBI	3	2288, 4977, 5765
BstEII	1	5416
Bsu36I	1	5421
Cfr10I	4	839, 2768, 5078, 6237
ClaI	1	6173
DraIII	2	2713, 3006
DrdI	4	1704, 2928, 3309, 4130
Eco52I	3	2635, 2800, 3370
Eco57I	4	237, 1285, 5637, 6821
EcoNI	1	6422
EcoO109I	4	3726, 3747, 5987, 7632
EcoRV	1	6145
EheI	2	3953, 4841
FspI	2	699, 2089
HaeII	4	1568, 1930, 3953, 4841
HindIII	2	3965, 4694
HpaI	3	4331, 4557, 7224
KasI	2	3953, 4841
MluI	1	2349
NarI	2	3953, 4841
NcoI	3	2782, 3754, 3840
NdeI	1	2879
PacI	1	6129
PciI	1	1810
PpuMI	2	3747, 5987
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, 5616
ScaI	2	441, 3398
SgfI	1	2790
SgrAI	1	6236

SphI	1	5468			
SspI	3	117,	6939,	7092	
Tth111I	4	2487,	2931,	3743,	4078
Van91I	3	2076,	2125,	6661	
VspI	2	748,	7028		
XbaI	3	4749,	4856,	6509	
XcmI	2	3722,	5537		
XmnI	1	320			