

pHTS-GAS Molecule Information

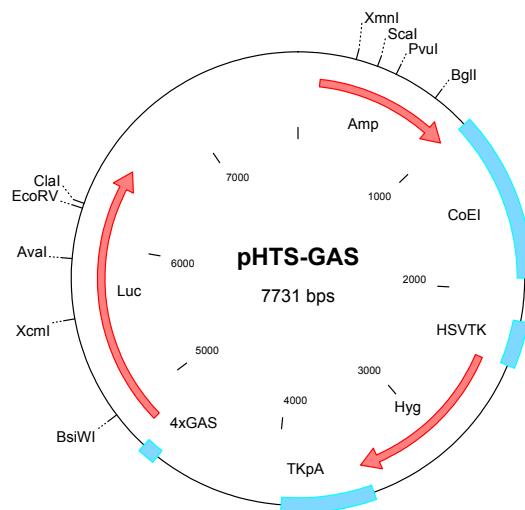
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Molecule Features:

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	4851	6503
4 x GAS Enhancer Element	4688	4784

Vector Map



Nucleotide Sequence of pHTS-GAS

1 GACGTCAGGT GGCAC TTTTC GGGGAAATGT GCGCGGAACC CCTATTTGTT TATTTTTCTA
61 AATACATTCA AATATGTATC CGCTCATGAG ACAATAACCC TGATAAATGC TTCAATAATA
121 TTGAAAAAGG AAGAGTATGA GTATTCAACA TTTCCGTGTC GCCCTTATTC CCTTTTTTGC
181 GGCATTTTGC CTTCTGTTT TTGCTCACCC AGAAACGCTG GTGAAAGTAA AAGATGCTGA
241 AGATCAGTTG GGTGCACGAG TGGGTTACAT CGAACTGGAT CTCAACAGCG GTAAGATCCT
301 TGAGAGTTTT CGCCCCGAA AAGGTTTTCC AATGATGAGC ACTTTTAAAG TTCTGCTATG
361 TGGCGCGGTA TTATCCCGTA TTGACGCCGG GCAAGAGCAA CTCGGTGCCT GCATACACTA
421 TTCTCAGAAT GACTTGGTTG AGTACTCACC AGTCACAGAA AAGCATCTTA CGGATGGCAT
481 GACAGTAAGA GAATTATGCA GTGCTGCCAT AACCATGAGT GATAACACTG CGGCCAACTT
541 ACTTCTGACA ACGATCGGAG GACCGAAGGA GCTAACCGCT TTTTTCACAA ACATGGGGGA
601 TCATGTAAC TCGCTTGATC GTTGGGAACC GGAGCTGAAT GAAGCCATAC CAAACGACGA
661 GCGTGACACC ACGATGCCTG TAGCAATGGC AACCAACGTTG CGCAAATAT TAACTGGCGA
721 ACTACTTACT CTAGCTTCCC GGCAACAATT AATAGACTGG ATGGAGGCGG ATAAAGTTGC
781 AGGACCATT CTGCGCTCGG CCCTCCCGG TGGCTGGTTT ATTGCTGATA AATCTGGAGC
841 CCGTGAGCGT 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 TCGTTCCTACT GAGCGTCAGA
1141 CCCCCTAGAA AAGATCAAAG GATCTTCTTG AGATCCTTTT TTTCTGCGCG TAATCTGCTG
1201 CTTGCAAACA AAAAAACCAC CGCTACCAGC GGTGGTTTGT TTGCCGGATC AAGAGCTACC
1261 AACTCTTTTT CCGAAGGTAA CTGGCTTCAG CAGAGCGCAG ATACCAAATA CTGTCTTCT
1321 AGTGTAGCCG TAGTTAGGCC ACCACTTCAA GAACTCTGTA GCACCGCCTA CATACTCGC
1381 TCTGCTAATC CTGTTACCAG TGGCTGCTGC CAGTGGCGAT AAGTCGTGTC TTACCGGGTT
1441 GGACTCAAGA CGATAGTTAC CGGATAAGGC GCAGCGGTCG GGCTGAACGG GGGGTTCTGTG
1501 CACACAGCCC AGCTTGGAGC GAACGACCTA CACCGAACTG AGATACCTAC AGCGTGAGCA
1561 TTGAGAAAGC GCCACGCTTC CCGAAGGGAG AAAGGCGGAC AGGTATCCGG TAAGCGGCAG
1621 GGTCGGAACA GGAGAGCGCA CGAGGGAGCT TCCAGGGGGA AACGCCTGGT ATCTTTATAG
1681 TCCTGTGCGG TTTCCGCCACC TCTGACTTGA GCGTCGATTT TTGTGATGCT CGTCAGGGGG
1741 GCGGAGCTAT GGAAAAACGC CAGCAACGCG CCTTTTTACG GTTCTGGCC TTTTGTGCGC
1801 CTTTTGCTCA CATGTTCTTT CCTGCGTTAT CCCTGATTCT GTGGATAACC GTATTACCGC
1861 CTTTGAGTGC TGATACCGCT CGCCGACGCC GAACGACCGA GCGCAAGTCA GCGACGAGG
1921 AAGCGGAAGA GCGCCTGATG CCGTATTTTC TCCTTACGCA TCTGTGCGGT ATTTACACCC
1981 GCATACGAAC GCCAGCAAGA CGTAGCCAG CGCGTCGGCC CCGAGATGCG CCGCGTGCAG
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2101 GTTCTCCGCA AGAATTGATT GGCTCCAATT CTTGGAGTGG TGAATCCGTT AGCGAGGTGC
2161 CGCCGGGCTG CTTTATCCCC GTGGCCCGTT GCTCGCGTTT GCTGGCGGTG TCCCCGGAAG
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2341 TTAAGGTGAC GCGTGTGGCC TCGAACACCG AGCGACCCTG CAGCGACCCG CTTAACAGCG
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2461 TCGAGAAGTT TCTGATCGAA AAGTTCGACA GCGTCTCCGA CCTGATGCAG CTCTCGGAGG
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2941 GATGCTCCGT CGCGCAGGCT CTCGATGAGC TGAATGTTG TCCCGAGGAC TGCCCCGAAG
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3121 ACATCTTCTT CTGGAGGCCG TGGTTGGCTT GTATGGAGCA GCAGACGCGC TACTTCGAGC
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3301 GTCGATGCGA CGCAATCGTC CGATCCGGAG CCGGGACTGT CGGGCGTACA CAAATCGCCC
3361 GCAGAAGCGC GGCCGTCTGG ACCGATGGCT GTGTAGAAGT ACTCGCCGAT AGTGAAACC
3421 GACGCCCCAG CACTCGTGGG GATCGGGAGA TGGGGGAGGC TAACTGAAAC ACGGAAGGAG
3481 ACAATACCGG AAGGAACCCG CGCTATGACG GCAATAAAAA GACAGAATAA AACGCACGGG
3541 TGTTGGGTCG TTTGTTTATA AACGCGGGGT TCGGTCCCAG GGCTGGCACT CTGTGATAC
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4201 AGGTTTTTAC CGTCATCACC GAAACGCGCG AGGCAGGATC AGCCATATCA CATTTGTAGA
4261 GGTTTTACTT GCTTTAAAAA ACCTCCCACA CCTCCCCCTG AACCTGAAAC ATAAAATGAA
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5341 TGTACACGTT CGTCACATCT CATCTACCTC CCGGTTTTTAA TGAATACGAT TTTGTACCAG
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5701 GTGCGTTGCT AGTACCAACC CTATTTTCAT TCTTCGCCAA AAGCACTCTG ATTGACAAAT
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6121 CTTACTGGGA CGAAGACGAA CACTTCTTCA TAGTTGACCG CTTGAAGTCT TTAATTAAT
6181 ACAAAGGATA TCAGGTGGCC CCCGCTGAAT TGGAATCGAT ATTGTTACAA CACCCCAACA
6241 TCTTCGACGC GGGCGTGGCA GGTCTTCCCG ACGATGACGC CCGTGAACCT CCCGCCCGC
6301 TTGTTGTTTT GGAGCACGGA AAGACGATGA CGGAAAAAGA GATCGTGGAT TACGTGCCA
6361 GTCAAGTAAC AACCGCGAAA AAGTTGCGCG GAGGAGTTGT GTTTGTGGAC GAAGTACCGA
6421 AAGGTCTTAC CGGAAAACCT GACGCAAGAA AAATCAGAGA GATCCTCATA AAGGCCAAGA
6481 AGGGCGGAAA GTCCAAATTG TAAAATGTAA CTGTATTGAG CGATGACGAA ATTCTTAGCT
6541 ATTGTAATAC TCTAGAGGAT CTTTGTGAAG GAACCTTACT TCTGTGGTGT GACATAATTG
6601 GACAAACTAC CTACAGAGAT TTAAAGCTCT AAGGTAAATA TAAAATTTTT AAGTGTATAA

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6661 TGTGTTAAAC TACTGATTCT AATTGTTTGT GTATTTTAGA TTCCAACCTA TGGAACCTAT
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6781 CCATCTAGTG ATGATGAGGC TACTGCTGAC TCTCAACATT CTACTCTCAA AAGAAGAGAA
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7141 GATGTATAGT GCCTTGACTA GAGATCATAA TCAGCCATAC CACATTTGTA GAGGTTTTAC
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7681 CGTGATACGC CTATTTTTAT AGGTTAATGT CATGATAATA ATGGTTTCTT A
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Restriction Map of pHTS-GAS

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,	5344	
AhdI	1	919			
AlwNI	1	1398			
ApaI	1	3726			
AvaI	2	2020,	5907		
BamHI	2	4688,	7399		
BanII	3	3683,	3726,	5871	
BbeI	2	3953,	4883		
BbsI	3	4854,	6132,	6262	
BglI	1	800			
BmrI	4	874,	4079,	5454,	6124
Bpu10I	1	4824			
Bpu1102I	1	4824			
BsaAI	2	4073,	5003		
BsaBI	1	7163			
BsaI	3	852,	3607,	6846	
BseRI	3	6391,	7413,	7440	
BsgI	1	6951			
BsiWI	1	5005			
BsmBI	2	2492,	4176		
BspHI	3	84,	1092,	7710	
BspMI	3	2734,	3976,	6258	
BsrBI	4	80,	1876,	2819,	3177
BsrDI	2	683,	865		
BsrGI	1	5341			
Bst1107I	1	4054			
BstAPI	2	2729,	3005		
BstBI	3	2288,	5019,	5807	
BstEII	1	5458			
Bsu36I	1	5463			
Cfr10I	4	839,	2768,	5120,	6279
ClaI	1	6215			
DraIII	2	2713,	3006		
DrdI	4	1704,	2928,	3309,	4130
Eco52I	3	2635,	2800,	3370	
Eco57I	4	237,	1285,	5679,	6863
EcoNI	1	6464			
EcoO109I	4	3726,	3747,	6029,	7674
EcoRV	1	6187			
EheI	2	3953,	4883		
FspI	2	699,	2089		
HaeII	4	1568,	1930,	3953,	4883
HindIII	1	3965			
HpaI	3	4331,	4557,	7266	
KasI	2	3953,	4883		
MluI	1	2349			
NarI	2	3953,	4883		
NcoI	3	2782,	3754,	3840	
NdeI	1	2879			
PacI	1	6171			
PciI	1	1810			
PpuMI	2	3747,	6029		
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,	5658		
ScaI	2	441,	3398		

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SgfI	1	2790			
SgrAI	1	6278			
SphI	1	5510			
SspI	3	117,	6981,	7134	
Tth111I	4	2487,	2931,	3743,	4078
Van91I	3	2076,	2125,	6703	
VspI	2	748,	7070		
XbaI	3	4791,	4898,	6551	
XcmI	2	3722,	5579		
XmnI	1	320			