

## **pHTS-CRE Molecule Information**

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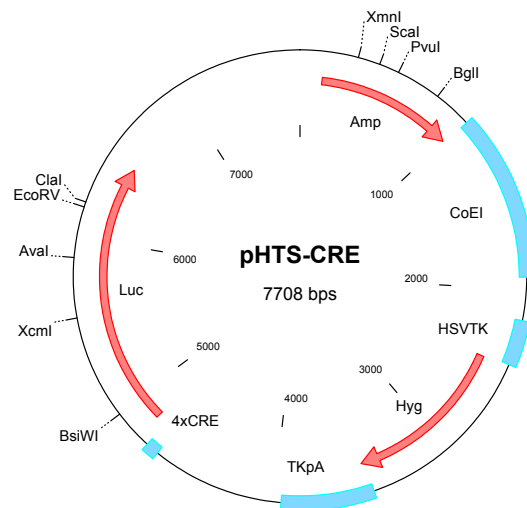
[Nucleotide Sequence](#)

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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

```
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 TTTTTCACA ACATGGGGGA
601 TCATGTAAC TCGCTTGATC GTTGGGAACC GGAGCTGAAT GAAGCCATAC CAAACGACGA
661 GCGTGACACC ACGATGCCTG TAGCAATGGC AACAACGTTG CGCAAATAT TAACTGGCGA
721 ACTACTTACT CTAGCTTCCC GGCAACAATT AATAGACTGG ATGGAGGCGG ATAAAGTTGC
781 AGGACCACTT 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
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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
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1801 CTTTTGCTCA CATGTTCTTT CCTGCGTTAT CCCTGATTCT GTGGATAACC GTATTACCGC
1861 CTTTGAGTGC TGATACCGCT CGCCGACGCC GAACGACCGA GCGCAAGTCA GCGCAGGAGG
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1981 GCATACGAAC GCCAGCAAGA CGTAGCCAG CGCGTCGGCC CCGAGATGCG CCGCGTGCAG
2041 CTGCTGGAGA TGGCGGACGC GATGGATATG TTCTGCCAAG GGTTGGTTTG CGCATTACACA
2101 GTTCTCCGCA AGAATTGATT GGCTCCAATT CTTGGAGTGG TGAATCCGTT AGCGAGGTGC
2161 CGCCGGGCTG CTTTATCCCC GTGGCCCGTT GCTCGCGTTT GCTGGCGGTG TCCCCGGAAG
2221 AAATATATTT GCATGTCTTT AGTTCTATGA TGACACAAAC CCCGCCAGC GTCTTGTCTA
2281 TGGCGAATTC GAACACGCAG ATGCAGTCGG GCGGCGCGCG TCCCAGGTCC ACTTCGCATA
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2401 TCAACAGCGT GCCGCAAGAT CAGCTTGATA TGAAAAAGCC TGAACCTACC GCGACGTCTG
2461 TCGAGAAGTT TCTGATCGAA AAGTTCGACA GCGTCTCCGA CCTGATGCAG CTCTCGGAGG
2521 GCGAAGAATC TCGTGTCTTC AGCTTCGATG TAGGAGGGCG TGGATATGTC CTGCGGGTAA
2581 ATAGCTGCGC CGATGGTTTC TACAAAGATC GTTATGTTTA TCGGCACTTT GCATCGGCCG
2641 CGCTCCCGAT TCCGGAAGTG CTTGACATTG GGAATTCAG CGAGAGCCTG ACCTATTGCA
2701 TCTCCCGCCG TGCACAGGGT GTCACGTTGC AAGACCTGCC TGAAACCGAA CTGCCCGCTG
2761 TTCTGCAGCC GGTGCGGGAG GCCATGGATG CGATCGCTGC GGCCGATCTT AGCCAGACGA
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2941 GATGCTCCGT CGCGCAGGCT CTCGATGAGC TGAATGTTG GCGCGAGGAC TGCCCCGAAG
3001 TCCGGCACCT CGTGCACGCG GATTTGCGCT CCAACAATGT CCTGACGGAC AATGGCCGCA
3061 TAACAGCGGT CATTGACTGG AGCGAGGCGA TGTTGCGGGA TTCCCAATAC GAGGTGCGCA
3121 ACATCTTCTT CTGGAGGCCG TGGTTGGCTT GTATGGAGCA GCAGACGCGC TACTTCGAGC
3181 GGAGGCATCC GGAGCTTGCA GGATCGCCGC GGCTCCGGGC GTATATGCTC CGCATTGGTC
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3241 TTGACCAACT CTATCAGAGC TTGGTTGACG GCAATTTTCGA 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 CTGTGATAC  
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3781 GGGTTATTCT TTTGGGCGTT GCGTGGGGT AGGTCCACGA CTGGACTGAG CAGACAGACC  
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4141 CTGCTCCCGG CATCCGCTTA CAGACAAGCT GTGACCGTCT CCGGGAGCTG CATGTGTCAG  
4201 AGGTTTTTAC CGTCATCACC GAAACGCGCG AGGCAGGATC AGCCATATCA CATTTGTAGA  
4261 GGTTTTACTT GCTTTAAAAA ACCTCCCACA CCTCCCCCTG AACCTGAAAC ATAAAATGAA  
4321 TGCAATTGTT GTTAACTTGT TTATTGCAGC TTATAATGGT TACAAATAAA GCAATAGCAT  
4381 CACAAATTTT ACAAATAAAG CATTTTTTCAC TGCATTCTAG TTGTGGTTTTG TCCAAACTCA  
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4861 GCGCCATTCT ATCCTCTAGA GGATGGAACC GCTGGAGAGC AACTGCATAA GGCTATGAAG  
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5161 CGTGAATTGC TCAACAGTAT GAACATTTTCG CAGCCTACCG TAGTGTTTTGT TTCCAAAAG  
5221 GGGTTGCAAA AAATTTTGAA CGTGCAAAAA AAATTACCAA TAATCCAGAA AATTATTATC  
5281 ATGGATTCTA AAACGGATTA CCAGGGATTT CAGTCGATGT ACACGTTCTG CACATCTCAT  
5341 CTACCTCCCG GTTTTAATGA ATACGATTTT GTACCAGAGT CCTTTGATCG TGACAAAACA  
5401 ATTGCACTGA TAATGAATTC CTCTGGATCT ACTGGGTTAC CTAAGGGTGT GGCCCTCCG  
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5581 ACACTCGGAT ATTTGATATG TGGATTTTCGA GTCGTCTTAA TGTATAGATT TGAAGAAGAG  
5641 CTGTTTTTAC GATCCCTTCA GGATTACAAA ATTCAAAGTG CGTTGCTAGT ACCAACCCTA  
5701 TTTTCATTCT TCGCCAAAAG CACTCTGATT GACAAATACG ATTTATCTAA TTTACACGAA  
5761 ATTGCTTCTG GGGGCGCACC TCTTTCGAAA GAAGTCGGGG AAGCGGTTGC AAAACGCTTC  
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5881 ACACCCGAGG GGGATGATAA ACCGGGCGCG GTCGGTAAAG TTGTTCCATT TTTTGAAGCG  
5941 AAGGTTGTGG ATCTGGATAC CGGAAAAACG CTGGGCGTTA ATCAGAGAGG CGAATTATGT  
6001 GTCAGAGGAC CTATGATTAT GTCCGGTTAT GTAAACAATC CGGAAGCGAC CAACGCCTTG  
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6181 GCTGAATTGG AATCGATATT GTTACAACAC CCCAACATCT TCGACGCGGG CGTGGCAGGT  
6241 CTTCCCGACG ATGACGCCGG TGAACCTCCC 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 AATGTAAGT TATTACGCGA TGACGAAATT CTTAGCTATT GTAATACTCT AGAGGATCTT  
6541 TGTGAAGGAA CCTTACTTCT GTGGTGTGAC ATAATTGGAC AAACCTACCTA 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
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6841 TTCAGAATTG CTAAGTTTTT TGAGTCATGC TGTGTTTAGT AATAGAACTC TTGCTTGCTT
6901 TGCTATTTAC AACCACAAAAG 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
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7201 CTCCCCCTGA ACCTGAAACA TAAAATGAAT GCAATTGTTG TTGTAACTT GTTTATTGCA
7261 GCTTATAATG GTTACAAATA AAGCAATAGC ATCACAAATT TCACAAATAA AGCATTTTTT
7321 TCACTGCATT CTAGTTGTGG TTTGTCCAAA CTCATCAATG TATCTTATCA TGTCTGGATC
7381 CCCAGGAAGC TCCTCTGTGT CCTCATAAAC CCTAACCTCC TCTACTTGAG AGGACATTCC
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7561 GAAGTCCCTT CCACTGCTGT GTTCCAGAAG TGTTGGTAAA CAGCCCACAA ATGTCAACAG
7621 CAGAAACATA CAAGCTGTCA CTTTGCACAA AGGGCCTCGT GATACGCCTA TTTTATAGG
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			

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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			