

pHTS-MCS Molecule Information

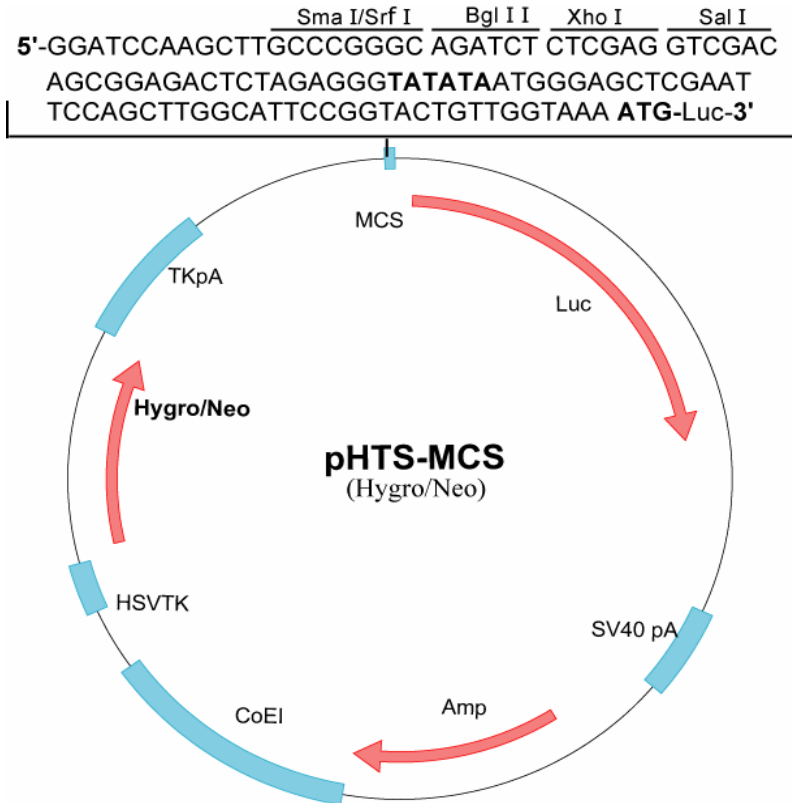
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Molecule Features:

Features	pHTS-MCS Position (nt)	pHTS-Neo-MCS Position (nt)
MCS	4690-4727	4486-4523
Ampicillin Resistance Gene	137-997	137-997
ColEI Replication Origin	1012-1930	1012-1930
HSV-TK Promoter	2167-2416	2167-2355
Hygromycin Resistance Gene	2430-3467	---
TK Polyadenylation Signal	3445-3957	3241-3753
Luciferase Gene	4797-6449	4593-6245
SV40 polyA	7120-7452	6916-7248
Neomycin Resistance Gene	---	2399-3193

Vector Map



Nucleotide Sequence of pHTS-MCS (Hygro)

1 GACGTCAGGT GGCAC TTTTC GGGGAAATGT GCGCGGAACC CCTATTTGTT TATTTTTCTA
61 AATACATTCA AATATGTATC CGCTCATGAG ACAATAACCC TGATAAATGC TTCAATAATA
121 TTGAAAAAGG AAGAGTATGA GTATTCAACA TTTCCGTGTC GCCCTTATTC CCTTTTTTGC
181 GGCATTTTGC CTTCTGTTTT TTGCTCACCC AGAAACGCTG GTGAAAGTAA AAGATGCTGA
241 AGATCAGTTG GGTGCACGAG TGGGTTACAT CGAACTGGAT CTCAACAGCG GTAAGATCCT
301 TGAGAGTTTT CGCCCCGAAG AACGTTTTTC 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 TTTTTCACACA 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 CCCTTCCGGC TGGCTGGTTT ATTGCTGATA AATCTGGAGC
841 GCGTGAGCGT 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 CCCCCTAGAA AAGATCAAAG GATCTTCTTG AGATCCTTTT TTTCTGCGCG TAATCTGCTG
1201 CTTGCAAACA AAAAAACCAC CGCTACCAGC GGTGGTTTTGT TTGCCGGATC AAGAGCTACC
1261 AACTCTTTTT CCGAAGGTAA CTGGCTTCAG CAGAGCGCAG ATACCAAATA CTGTCTTCT
1321 AGTGTAGCCG TAGTTAGGCC ACCACTTCAA GAACTCTGTA GCACCGCCTA CATACCTCGC
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 GTTGACGAGG
1921 AAGCGGAAGA GCGCCTGATG CCGTATTTTC TCCTTACGCA TCTGTGCGGT ATTTACACCC
1981 GCATACGAAC GCCAGCAAGA CGTAGCCAG CGCGTCGGCC CCGAGATGCG CCGCGTGGC
2041 CTGCTGGAGA TGGCGGACGC GATGGATATG TTCTGCCAAG GGTTGGTTTTG CGCATTACACA
2101 GTTCTCCGCA AGAATTGATT GGCTCCAATT CTTGGAGTGG TGAATCCGTT AGCGAGGTGC
2161 CGCCGGGCTG CTTTATCCCC GTGGCCCGTT GCTCGCGTTT GCTGGCGGTG TCCCCGGAAG
2221 AAATATATTT GCATGTCTTT AGTTCTATGA TGACACAAAC CCCGCCAGC GTCTTGTCTAT
2281 TGGCGAATTC GAACACGCAG ATGCAGTCGG GCGCGCGCGG TCCCAGGTCC ACTTCGCATA
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2401 TCAACAGCGT GCCGCAAGAT CAGCTTGATA TGAAAAAGCC TGAACCTACC GCGACGTCTG
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2521 GCGAAGAATC TCGTGTCTTC AGCTTCGATG TAGGAGGGCG TGGATATGTC CTGCGGGTAA
2581 ATAGCTGCGC CGATGGTTTT TACAAAGATC GTTATGTTTA TCGGCACTTT GCATCGGCCG
2641 CGCTCCCAGT TCCGGAAGTG CTTGACATTG GGAATTTCAG CGAGAGCCTG ACCTATTGCA
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3061 TAACAGCGGT CATTGACTGG AGCGAGGCGA TGTTCCGGGA TTCCCAATAC GAGGTGCGCA
3121 ACATCTTCTT CTGGAGGCCG TGGTTGGCTT GTATGGAGCA GCAGACGCGC TACTTCGAGC
3181 GGAGGCATCC GGAGCTTGCA GGATCGCCGC GGCTCCGGGC GTATATGCTC CGCATTGGTC

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3301 GTCGATGCGA CGCAATCGTC CGATCCGGAG CCGGGACTGT CGGGCGTACA CAAATCGCCC
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3481 ACAATACCGG AAGGAACCCG CGCTATGACG GCAATAAAAA GACAGAATAA AACGCACGGG
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3661 CCCAAGTTCG GGTGAAGGCC CAGGGCTCGC AGCCAACGTC GGGGCGGCAA GCCCGCCATA
3721 GCCACGGGCC CCGTGGGTTA GGGACGGGGT CCCCCATGGG GAATGGTTTA TGGTTCGTGG
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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
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5221 AATTACCAAT AATCCAGAAA ATTATTATCA TGGATTCTAA AACGGATTAC CAGGGATTTC
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5401 CTGGGTTACC TAAGGGTGTG GCCCTTCCGC ATAGAAGTGC CTGCGTCAGA TTCTCGCATG
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6001 TAAACAATCC GGAAGCGACC AACGCCTTGA TTGACAAGGA TGGATGGCTA CATTCTGGAG
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6181 CCAACATCTT CGACGCGGGC GTGGCAGGTC TTCCCGACGA TGACGCCGGT GAACTTCCCG
6241 CCGCCGTTGT TGTTTTGGAG CACGGAAAGA CGATGACGGA AAAAGAGATC GTGGATTACG
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6481 TTAGCTATTG TAATACTCTA GAGGATCTTT GTGAAGGAAC CTTACTTCTG TGGTGTGACA
6541 TAATTGGACA AACTACCTAC AGAGATTTAA AGCTCTAAGG TAAATATAAA ATTTTTAAGT
6601 GTATAATGTG TTAAACTACT GATTCTAATT GTTTGTGTAT TTTAGATTCC AACCTATGGA

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6901 ACTGCTATAC AAGAAAATTA TGGAAAATA TTCTGTAACC TTTATAAGTA GGCATAACAG
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7081 ATATTTGATG TATAGTGCCT TGACTAGAGA TCATAATCAG CCATACCACA TTTGTAGAGG
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7261 TCACAAATTT CACAAATAAA GCATTTTTTTT CACTGCATTG TAGTTGTGGT TTGTCCAAAC
7321 TCATCAATGT ATCTTATCAT GTCTGGATCC CCAGGAAGCT CCTCTGTGTC CTCATAAACC
7381 CTAACCTCCT CTACTTGAGA GGACATTCCA ATCATAGGCT GCCCATCCAC CCTCTGTGTC
7441 CTCCTGTTAA TTAGGTCACT TAACAAAAAG GAAATTGGGT AGGGGTTTTT CACAGACCGC
7501 TTTCTAAGGG GTAATTTTAA AATATCTGGG AAGTCCCTTC CACTGCTGTG TTCCAGAAGT
7561 GTTGGTAAAC AGCCACAAA TGTCAACAGC AGAAACATAC AAGCTGTCAC TTTGCACAAA
7621 GGGCCTCGTG ATACGCCTAT TTTTATAGGT TAATGTCATG ATAATAATGG TTTCTTA

Restriction Map of pHTS-MCS(Hygro)

The list contains restriction enzymes cut four times or fewer.

Enzyme	#sites	Bp position of recognition site			
AatII	2	1,	2453		
AccI	2	4054,	4722		
AflIII	3	1810,	2349,	5290	
AhdI	1	919			
AlwNI	1	1398			
ApaI	1	3726			
AvaI	4	2020,	4703,	4716,	5853
BamHI	2	4690,	7345		
BanII	4	3683,	3726,	4756,	5817
BbeI	2	3953,	4829		
BbsI	3	4800,	6078,	6208	
BglI	1	800			
BglII	1	4710			
BmrI	4	874,	4079,	5400,	6070
BsaAI	2	4073,	4949		
BsaBI	1	7109			
BsaI	3	852,	3607,	6792	
BseRI	3	6337,	7359,	7386	
BsgI	1	6897			
BsiWI	1	4951			
BsmBI	2	2492,	4176		
BspHI	3	84,	1092,	7656	
BspMI	3	2734,	3976,	6204	
BsrBI	4	80,	1876,	2819,	3177
BsrDI	2	683,	865		
BsrGI	1	5287			
Bst1107I	1	4054			
BstAPI	2	2729,	3005		
BstBI	3	2288,	4965,	5753	
BstEII	1	5404			
Bsu36I	1	5409			
Cfr10I	4	839,	2768,	5066,	6225
ClaI	1	6161			
DraIII	2	2713,	3006		
DrdI	4	1704,	2928,	3309,	4130
Ecl136II	1	4756			
Eco52I	3	2635,	2800,	3370	
Eco57I	4	237,	1285,	5625,	6809
EcoNI	1	6410			
EcoO109I	4	3726,	3747,	5975,	7620
EcoRV	1	6133			
EheI	2	3953,	4829		
FspI	2	699,	2089		
HaeII	4	1568,	1930,	3953,	4829
HindIII	2	3965,	4696		
HpaI	3	4331,	4559,	7212	
KasI	2	3953,	4829		
MluI	1	2349			
NarI	2	3953,	4829		
NcoI	3	2782,	3754,	3840	

NdeI	1	2879			
PacI	1	6117			
PciI	1	1810			
PpuMI	2	3747,	5975		
PshAI	1	2453			
Psp1406I	2	321,	694		
PspOMI	1	3726			
PstI	3	2378,	2763,	3974	
PvuI	2	552,	2791		
RsrII	1	2837			
SacI	1	4756			
SacII	1	3207			
SalI	1	4722			
SanDI	1	3747			
SapI	2	1926,	5604		
ScaI	2	441,	3398		
SgfI	1	2790			
SgrAI	1	6224			
SmaI	1	4703			
SphI	1	5456			
SrfI	1	4702			
SspI	3	117,	6927,	7080	
Tth111I	4	2487,	2931,	3743,	4078
Van91I	3	2076,	2125,	6649	
VspI	2	748,	7016		
XbaI	3	4737,	4844,	6497	
XcmI	2	3722,	5525		
XhoI	1	4716			
XmaI	1	4703			
XmnI	1	320			

Nucleotide Sequence of pHTS-Neo-MCS

1 GACGTCAGGT GGCAC TTTTC GGGGAAATGT GCGCGGAACC CCTATTTGTT TATTTTTCTA
61 AATACATTCA AATATGTATC CGCTCATGAG ACAATAACCC TGATAAATGC TTCAATAATA
121 TTGAAAAAGG AAGAGTATGA GTATTCAACA TTTCCGTGTC GCCCTTATTC CCTTTTTTGC
181 GGCATTTTGC CTTCTGTGTT TTGCTCACCC AGAAAACGCTG 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 GACTTG GTT AGTACTCACC AGTCACAGAA AAGCATCTTA CGGATGGCAT
481 GACAGTAAGA GAATTATGCA GTGCTGCCAT AACCATGAGT GATAA CACTG CGGCCAACTT
541 ACTTCTGACA ACGATCGGAG GACCGAAGGA GCTAACCGCT TTTTTCACA ACATGGGGGA
601 TCATGTA ACT CGCCTTGATC GTTGGGAACC GGAGCTGAAT GAAGCCATAC CAAACGACGA
661 GCGTGACACC ACGATGCCTG TAGCAATGGC AACAACTTG CGCAA CTAT 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 CCCC GTAGAA AAGATCAAAG GATCTTCTTG AGATCCTTTT TTTCTGCGCG TAATCTGCTG
1201 CTTGCAAACA AAAAAACCAC CGTACCAGC GGTGGTTTGT TTGCCGGATC AAGAGCTACC
1261 AACTCTTTTT CCGAAGGTAA CTGGCTTCAG CAGAGCGCAG ATACCAAATA CTGTCTTCT
1321 AGTGTAGCCG TAGTTAGGCC ACCACTTCAA GAACTCTGTA GCACCCCTA CATACTCGC
1381 TCTGCTAATC CTGTTACCAG TGGCTGTGC CAGTGGCGAT AAGTCGTGTC TTACCGGTT
1441 GGTCAACA GAATAGTTAC CGGATAAGGC CGAGCGGTGC GGCTGAACGG GGGTTCTGTG
1501 CACACAGCCC AGCTTGAGC 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 TTTTGTGGC
1801 CTTTTGCTCA CATGTTCTTT CCTGCGTTAT CCCTGATTCT GTGGATAACC GTATTACCGC
1861 CTTTGAGTGC TGATAACCGCT CGCCGACGCC GAACGACCGA GCGCAAGTCA GTGAGCGAGG
1921 AAGCGGAAGA GCGCCTGATG CGGTATTTTC TCCTTACGCA TCTGTGCGGT ATTTACACCC
1981 GCATACGAAC GCCAGCAAGA CGTAGCCAG CGCGTCGGCC CCGAGATGCG CCGCGTGCGG
2041 CTGCTGGAGA TGGCGGACGC GATGGATATG TTCTGCCAAG GGTTGGTTTG CGCATTACA
2101 GTTCTCCGCA AGAATTGATT GGCTCCAATT CTTGGAGTGG TGAATCCGTT AGCGAGGTGC
2161 CGCCGGGCTG CTTTATCCCC GTGGCCCGTT GCTCGCGTTT GCTGGCGGTG TCCCCGGAAG
2221 AAATATATTT GCATGTCTTT AGTTCTATGA TGACACAAAC CCCGCCAGC GTCTTGTCTAT
2281 TGGCGAATTC GAACACGCAG ATGCAGTCGG GGCGGCGCGG TCCCAGGTCC ACTTCGCATA
2341 TTAAGGTGAC GCGTGATTCT TCTGACACAA CAGTCTCGAA CTTAAGGCTA GAGCCACCAT
2401 GATTGAACAA GATGGATTGC ACGCAGGTTT TCCGGCCGCT TGGGTGGAGA GGCTATTCGG
2461 CTATGACTGG GCACAACAGA CAATCGGCTG CTCTGATGCC GCCGTGTTCC GGCTGTGAGC
2521 CGAGGGGCGC CCGGTTCTTT TTGTCAAGAC CGACCTGTCC GGTGCCCTGA ATGAATGCA
2581 GGACGAGGCA GCGCGGCTAT CGTGGCTGGC CACGACGGGC GTTCTTTCG CAGCTGTGCT
2641 CGACGTTGTC ACTGAAGCGG GAAGGGACTG GCTGCTATTG GGCGAAGTGC CGGGGCAGGA
2701 TCTCTGTCA TCTCACCTTG CTCCTGCCGA GAAAGTATCC ATCATGGCTG ATGCAATGCG
2761 GCGGCTGCAT ACGCTTGATC CGGCTACCTG CCCATTGAC CACCAAGCGA AACATCGCAT
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2881 GCATCAGGGG CTCGCGCCAG CCGAACTGTT CGCCAGGCTC AAGGCGCGCA TGCCCGACGG
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3001 CCGCTTTTTCT GGATTCATCG ACTGTGGCCG GCTGGGTGTG GCGGACCCTG ATCAGGACAT
3061 AGCGTTGGCT ACCCGTGATA TTGCTGAAGA GCTTGGCGGC GAATGGGCTG ACCGCTTCT
3121 CGTGCTTTAC GGTATCGCCG CTCCCATTG GCAGCGCATC GCCTTCTATC GCCTTCTTGA
3181 CGAGTTCTTC TGACCCACTC GCCGATAGTG GAAACCGACG CCCCAGCACT CGTGGGGATC

3241 GGGAGATGGG GGAGGCTAAC TGAAACACGG AAGGAGACAA TACCGGAAGG AACCCGCGCT
3301 ATGACGGCAA TAAAAAGACA GAATAAAACG CACGGGTGTT GGGTCGTTTG TTCATAAACG
3361 CGGGGTTCGG TCCCAGGGCT GGC ACTCTGT CGATACCCCA CCGAGACCCC ATTGGGGCCA
3421 ATACGCCCGC GTTTCTTCCT TTTCCCCACC CCAACCCCA AGTTCGGGTG AAGGCCCAGG
3481 GCTCGCAGCC AACGTCGGGG CGGCAAGCCC GCCATAGCCA CGGGCCCCGT GGGTTAGGGA
3541 CGGGGTCCCC CATGGGGAAT GGTTTATGGT TCGTGGGGGT TATTCTTTTG GGC GTTGC GT
3601 GGGGTCAGGT CCACGACTGG ACTGAGCAGA CAGACCCATG GTTTTTGGAT GGCCTGGGCA
3661 TGGACCGCAT GTACTGGCGC GACACGAACA CCGGGCGTCT GTGGCTGCCA AACACCCCCG
3721 ACCCCCAAAA ACCACCGCGC GGATTTCTGG CGCCAGTGCC AAGCTTGGGC TGCAGGTCGA
3781 GGAATTCCTT TGCCTAATTT TATGGTGCAC TCTCAGTACA ATCTGCTCTG ATGCCGCATA
3841 GTTAAGCCAG TATACTCC GCTATCGCTA CGTACTGGG TCATGGCTGC GCCCCGACAC
3901 CCGCCAACAC CCGCTGACGC GCCCTGACGG GCTTGTCTGC TCCCGGCATC CGCTTACAGA
3961 CAAGCTGTGA CCGTCTCCGG GAGCTGCATG TGTCAGAGGT TTTACCCGTC ATCACCGAAA
4021 CGCGCAGAGG AGGATCAGCC ATATCACATT TGTAGAGGTT TTA CTTGCTT TAAAAAACCT
4081 CCCACACCTC CCCCTGAACC TGAAACATAA AATGAATGCA ATTGTTGTTA ACTTGT TTTAT
4141 TGCAGCTTAT AATGGTTACA AATAAAGCAA TAGCATCACA AATTTACAAA ATAAAGCATT
4201 TTTTTCACTG CATTCTAGTT GTGGTTTTGTC CAAACTCATC AATGTATCTT ATCATGTCTG
4261 GATCAGCCAT ATCACATTTG TAGAGTTTTT ACTTGCTTTA AAAAACCTCC CACACCTCCC
4321 CCTGAACCTG AAACATAAAA TGAATGCAAT TGTTGTTAAC TTGTTTATTG CAGCTTATAA
4381 TGGTTACAAA TAAAGCAATA GCATCACAAA TTTCACAAAT AAAGCATT TT T T T T T T
4441 CTAGTTGTGG TTTGTCCAAA CTCATCAATG TATCTTATCA TGTCTGGATC CAAGCTTGCC
4501 CGGGCAGATC TCTCGAGGTC GACAGCGGAG ACTCTAGAGG GTATATAATG GGAGCTCGAA
4561 TTCCAGCTTG GCATTCCGGT ACTGTTGGTA AAATGGAAGA CGCCAAAAAC ATAAAGAAAG
4621 GCCC GGCGCC ATTCTATCCT CTAGAGGATG GAACCGCTGG AGAGCAACTG CATAAGGCTA
4681 TGAAGAGATA CGCCCTGGTT CCTGGAACAA TTGCTTTTAC AGATGCACAT ATCGAGGTGA
4741 ACATCACGTA CGCGGAATAC TTCGAAATGT CCGTTCGGTT GGCAGAAGCT ATGAAACGAT
4801 ATGGGCTGAA TACAAATCAC AGAATCGTCG TATGCAGTGA AA ACTCTCTT CAATTCTTTA
4861 TGCCGGTGTT GGGCGCGTTA TTTATCGGAG TTGCAGTTGC GCCC GCGA AC GACATTTATA
4921 ATGAACGTGA ATTGCTCAAC AGTATGAACA TTTTCGAGCC TACCGTAGTG TTTGTTTCCA
4981 AAAAGGGGTT CAAAAAATT TTGAACGTGC AAAAAAATT ACCAATAATC CAGAAAATTA
5041 TTATCATGGA TTCTAAAACG GATTACCAGG GATTT CAGTC GATGTACACG TTCGT CACAT
5101 CTCATCTACC TCCC GGTTTT AATGAATACG ATTTTGTACC AGAGTCCTTT GATCGTGACA
5161 AAACAATTGC ACTGATAATG AATTCCTCTG GATCTACTGG GTTACCTAAG GGTGTGGCCC
5221 TTCCGCATAG AACTGCCTGC GTCAGATTCT CGCATGCCAG AGATCCTATT TTTGGCAATC
5281 AAATCATTCC GGATACTGCG ATTTTAAAGT TTGTTCCATT CCATCACGGT TTTGGAATGT
5341 TTA CTACT CGGATATTTG ATATGTGGAT TTCGAGTCGT CTTAATGTAT AGATTTGAAG
5401 AAGAGCTGTT TTTACGATCC CTT CAGGATT ACAA AATTCA AAGTGC GTTG CTAGTACCAA
5461 CCCTATTTTC ATTCTTCGCC AAAAGCACTC TGATTGACAA ATACGATTTA TCTAATTTAC
5521 ACGAAATTGC TTCTGGGGGC GCACCTCTTT CGAAAGAAGT CGGGGAAGCG GTTGCAAAAC
5581 GCTTCCATCT TCCAGGGATA CGACAAGGAT ATGGGCTCAC TGAGACTACA TCAGCTATTC
5641 TGATTACACC CGAGGGGGAT GATAAACCGG GCGCGGTCCG TAAAGTTGTT CCATTTTTTG
5701 AAGCGAAGGT TGTGGATCTG GATACCGGGA AAACGCTGGG CGTTAATCAG AGAGGCGAAT
5761 TATGTGTCAG AGGACCTATG ATTATGTCCG GTTATGTAAA CAATCCGGAA GCGACCAACG
5821 CTTTGATTGA CAAGGATGGA TGGCTACATT CTGGAGACAT AGCTTACTGG GACGAAGACG
5881 AACACTTCTT CATAGTTGAC CGCTTGAAGT CTTTAATTAA ATACAAAGGA TATCAGGTGG
5941 CCCC CGCTGA ATTGGAATCG ATATTGTTAC AACACCCCAA CATCTTCGAC GCGGGCGTGG
6001 CAGGTCTTCC CGACGATGAC GCCGGTGAAC TTCCC GCGC CGTTGTTGTT TTGGAGCACG
6061 GAAAGACGAT GACGGA AAAA GAGATCGTGG ATTACGTCGC CAGTCAAGTA ACAACCGCGA
6121 AAAAGTTGCG CGGAGGAGTT GTGTTTGTGG ACGAAGTACC GAAAGGTCTT ACCGGA AAAAC
6181 TCGACGCAAG AAAAATCAGA GAGATCCTCA TAAAGGCCAA GAAGGGCGGA AAGTCCAAAT
6241 TGTA AAATGT AACTGTATTC AGCGATGACG AAATTCTTAG CTATTGTAAT ACTCTAGAGG
6301 ATCTTTGTGA AGGAACCTTA CTTCTGTGGT GTGACATAAT TGGACAAACT ACCTACAGAG
6361 ATTTAAAGCT CTAAGGTAAA TATAAAATTT TTAAGTGTAT AATGTGTTAA ACTACTGATT
6421 CTAATTGTTT GTGTATTTTA GATTCCAACC TATGGA ACTT ATGAATGGGA GCAGTGGTGG
6481 AATGCCTTTA ATGAGGAAAA CCTGTTTTGC TCAGAAGAAA TGCCATCTAG TGATGATGAG
6541 GCTACTGCTG ACTCTCAACA TTCTACTCTC AAAAGAAGAG AAAGGTAGAG ACCCAAGGAC
6601 TTTCTTCAG AATTGCTAAG TTTTTTGAGT CATGCTGTGT TTAGTAATAG AACTCTTGCT

6661 TGCTTTGCTA TTTACAACCA CAAAGGAAAA AGCTGCACTG CTATACAAGA AAATTATGGA
6721 AAAATATTCT GTAACCTTTA TAAGTAGGCA TAACAGTTAT AATCATAACA TACTGTTTTT
6781 TCTTACTCCA CACAGGCATA GAGTGTCTGC TATTAATAAC TATGCTCAA AATTGTGTAC
6841 CTTTAGCTTT TTAATTTGTA AAGGGGTTAA TAAGGAATAT TTGATGTATA GTGCCTTGAC
6901 TAGAGATCAT AATCAGCCAT ACCACATTTG TAGAGGTTTT ACTTGCTTTA AAAAACCTCC
6961 CACACCTCCC CCTGAACCTG AAACATAAAA TGAATGCAAT TGTTGTTGTT AACTTGTTTA
7021 TTGCAGCTTA TAATGGTTAC AAATAAAGCA ATAGCATCAC AAATTTTACA AATAAAGCAT
7081 TTTTTTCACT GCATTCTAGT TGTGGTTTGT CCAAACCTCAT CAATGTATCT TATCATGTCT
7141 GGATCCCCAG GAAGCTCCTC TGTGTCCTCA TAAACCCTAA CCTCCTCTAC TTGAGAGGAC
7201 ATTCCAATCA TAGGCTGCCC ATCCACCCTC TGTGTCCTCC TGTTAATTAG GTCACCTAAC
7261 AAAAAGGAAA TTGGGTAGGG GTTTTTCACA GACCGCTTTC TAAGGGGTAA TTTTAAATA
7321 TCTGGGAAGT CCCTTCCACT GCTGTGTTCC AGAAGTGTTG GTAAACAGCC CACAAATGTC
7381 AACAGCAGAA ACATACAAGC TGTCACTTTC CACAAAGGGC CTCGTGATAC GCCTATTTTT
7441 ATAGGTTAAT GTCATGATAA TAATGGTTTC TTA

Restriction Map of pHTS-Neo-MCS

The list contains restriction enzymes cut four times or fewer.

Enzyme	#sites	-- Bp position of recognition site --			
AatII	1	1			
AccI	2	3850,	4518		
AccIII	2	5288,	5804		
AflII	1	2381			
AflIII	3	1810,	2349,	5086	
AhdI	1	919			
Alw44I	3	252,	1498,	3805	
AlwNI	1	1398			
ApaI	1	3522			
AvaI	4	2020,	4499,	4512,	5649
BamHI	2	4486,	7141		
BbeI	3	2526,	3749,	4625	
BbsI	3	4596,	5874,	6004	
BglI	1	800			
BglII	1	4506			
BpmI	4	834,	2044,	4657,	5851
BsaAI	3	2829,	3869,	4745	
BsaBI	1	6905			
BsaI	3	852,	3403,	6588	
BseRI	3	6133,	7155,	7182	
BsgI	1	6693			
BsiWI	1	4747			
BsmBI	1	3972			
BspHI	3	84,	1092,	7452	
BspMI	4	2423,	2786,	3772,	6000
BsrBI	3	80,	1876,	3138	
BsrDI	3	683,	865,	2753	
BsrGI	1	5083			
BssHII	1	2924			
Bst1107I	1	3850			
BstBI	3	2288,	4761,	5549	
BstEII	1	5200			
Bsu36I	1	5205			
ClaI	1	5957			
DrdI	4	1704,	2364,	2548,	3926
Ecl136II	1	4552			
Eco52I	1	2433			
EcoNI	1	6206			
EcoO109I	4	3522,	3543,	5771,	7416
EcoRI	4	2285,	3782,	4558,	5180
EcoRV	1	5929			
EheI	3	2526,	3749,	4625	
FspI	3	699,	2089,	2627	
HindIII	2	3761,	4492		
HpaI	3	4127,	4355,	7008	
KasI	3	2526,	3749,	4625	
MluI	1	2349			
MscI	1	2607			
NaeI	1	3027			
NarI	3	2526,	3749,	4625	
NcoI	3	2959,	3550,	3636	

NgoMIV	1	3027				
PacI	1	5913				
PciI	1	1810				
PpuMI	2	3543,	5771			
Psp1406I	2	321,	694			
PspOMI	1	3522				
PstI	2	2576,	3770			
PvuI	1	552				
PvuII	1	2631				
RsrII	1	3042				
SacI	1	4552				
SalI	1	4518				
SanDI	1	3543				
SapI	4	1926,	2876,	3086,	5400	
ScaI	1	441				
SgrAI	1	6020				
SmaI	1	4499				
SphI	2	2928,	5252			
SrfI	1	4498				
SspI	3	117,	6723,	6876		
TatI	4	441,	3670,	3815,	5083	
Tth111I	3	2642,	3539,	3874		
Van91I	3	2076,	2125,	6445		
VspI	2	748,	6812			
XbaI	3	4533,	4640,	6293		
XcmI	2	3518,	5321			
XhoI	1	4512				
XmaI	1	4499				
XmnI	1	320				