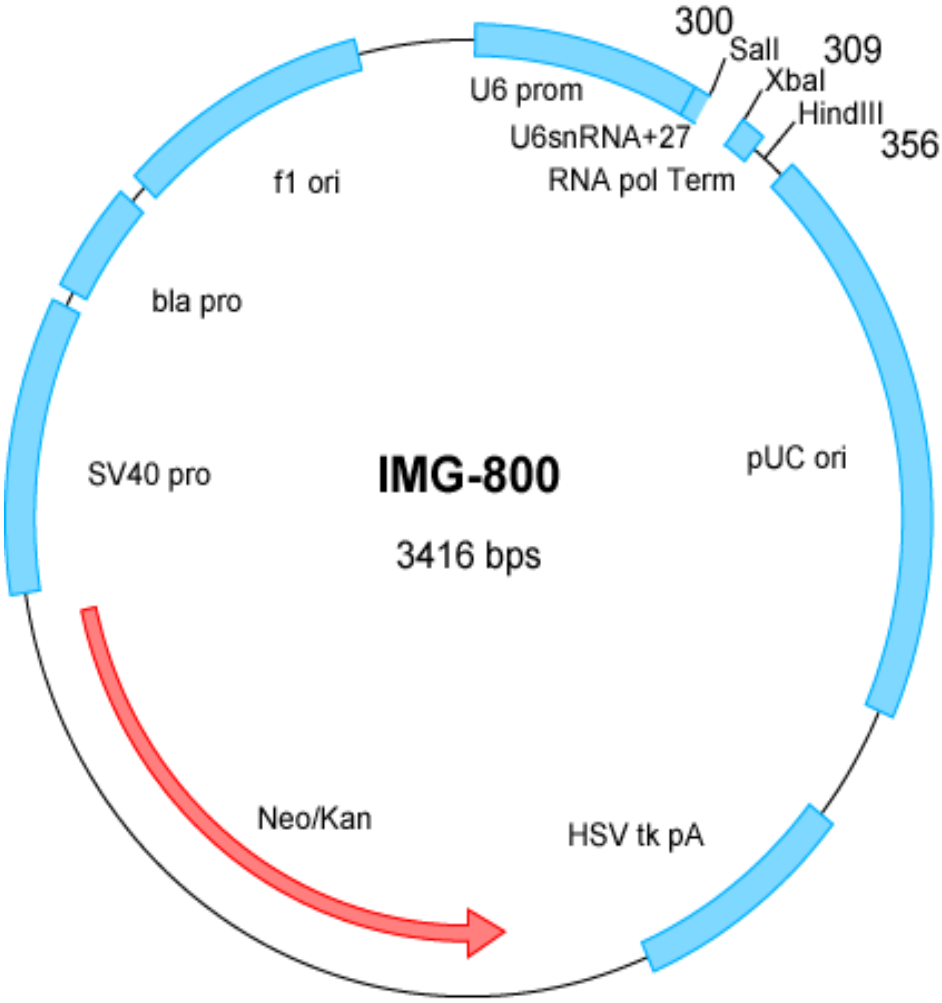
IMG-800 (pSuppressorNeo):

IMG-800 is a plasmid-based system to generate siRNAs. Inserts cloned into the vector express RNAs under U6 promoter in transfected mammalian cells. The functional neomycin resistance gene allows generation of permanent gene suppressed cell lines using G418 selection.



Features of pSuppressor Neo 3416 nucleotides:

Neomycin resistance ORF: bases 2431-1637 Complementary Strand (C)
SV40 early promoter: bases 2804-2466 (C)
U6 promoter: bases: 8-281
U6snRNA+27: bases: 281-308
Cloning sites: *Sal* I 300, *Xba* I 309
Terminator: bases 313-339
pUC ori: bases 385-1052
bla promoter: bases 2949-2823 (C)
F1 ori: bases 2973-3279
Sequencing Primer Forward (129-148): 5'-AATACGTGACGTAGAAAGTA-3'
Sequencing Primer Reverse (389-369): 5'-GCTCACATGTGATATCCGCAG-3'

IMG-800 nucleotide sequence:

```
   1  tgggatccaa ggtcgggcag gaagagggcc tatttcccat gattccttca tatttgcata
  61  tacgatacaa ggctgttaga gagataatta gaattaattt gactgtaaac acaaagatat
 121  tagtacaaaa tacgtgacgt agaaagtaat aatttcttgg gtagtttgca gttttaaaat
 181  tatgttttaa aatggactat catatgctta ccgtaacttg aaagtatttc gatttcttgg
 241  ctttatatat cttgtggaaa ggacgaaaca ccgtgctcgc ttcggcagca catatactag
 301  tcgacgggtc tagagcggac ttcggtccgc tttttactag gacctgcagg catgcaagct
 361  tgggagatct gcggatatca catgtgagca aaaggccagc aaaaggccag gaaccgtaaa
 421  aaggccgcgt tgctggcgtt tttccatagg ctccgcccccc ctgacgagca tcacaaaaat
 481  cgacgctcaa gtcagaggtg gcgaaacccg acaggactat aaagatacca ggcgtttccc
 541  cctggaagct ccctcgtgcg ctctcctgtt ccgaccctgc cgcttaccgg atacctgtcc
 601  gcctttctcc cttcgggaag cgtggcgctt tctcatagct cacgctgtag gtatctcagt
 661  tcggtgtagg tcgttcgctc caagctgggc tgtgtgcacg aaccccccgt tcagcccgac
 721  cgctgcgcct tatccggtaa ctatcgtctt gagtccaacc cggtaagaca cgacttatcg
 781  ccactggcag cagccactgg taacaggatt agcagagcga ggtatgtagg cggtgctaca
 841  gagttcttga agtggtggcc taactacggc tacactagaa ggacagtatt tggtatctgc
 901  gctctgctga agccagttac cttcggaaaa agagttggta gctcttgatc cggcaaacaa
 961  accaccgctg gtagcggtgg tttttttgtt tgcaagcagc agattacgcg cagaaaaaaa
1021  ggatctcaag aagatccttt gatcttttct acggggtctg acgctcagtg gaacgaaaac
1081  tcacgttaag ggattttggt catgagatta tcaaaaagga tcttcaccta gatcctttta
1141  aattaaaaat gaagttttaa atcaatctaa agtatatatg agtaacctga ggctatggca
1201  gggcctgccg ccccgacgtt ggctgcgagc cctgggcctt cacccgaact tgggggtgg
1261  ggtggggaaa aggaagaaac gcgggcgtat tggccccaat ggggtctcgg tggggtatcg
1321  acagagtgcc agccctggga ccgaaccccg cgtttatgaa caaacgaccc aacaccgtgc
1381  gttttattct gtctttttat tgccgtcata gcgcgggttc cttccggtat tgtctccttc
1441  cgtgtttcag ttagcctccc cctagggtgg gcgaagaact ccagcatgag atccccgcgc
1501  tggaggatca tccagccggc gtcccggaaa acgattccga agcccaacct ttcatagaag
1561  gcggcggtgg aatcgaaatc tcgtgatggc aggttgggcg tcgcttggtc ggtcatttcg
1621  aaccccagag tcccgctcag aagaactcgt caagaaggcg atagaaggcg atgcgctgcg
1681  aatcgggagc ggcgataccg taaagcacga ggaagcggtc agcccattcg ccgccaagct
1741  cttcagcaat atcacgggta gccaacgcta tgtcctgata gcggtccgcc acacccagcc
1801  ggccacagtc gatgaatcca gaaaagcggc cattttccac catgatattc ggcaagcagg
1861  catcgccatg ggtcacgacg agatcctcgc cgtcgggcat gctcgccttg agcctggcga
1921  acagttcggc tggcgcgagc ccctgatgct cttcgtccag atcatcctga tcgacaagac
1981  cggcttccat ccgagtacgt gctcgctcga tgcgatgttt cgcttggtgg tcgaatgggc
2041  aggtagccgg atcaagcgta tgcagccgcc gcattgcatc agccatgatg gatactttct
2101  cggcaggagc aaggtgagat gacaggagat cctgccccgg cacttcgccc aatagcagcc
2161  agtcccttcc cgcttcagtg acaacgtcga gcacagctgc gcaaggaacg cccgtcgtgg
2221  ccagccacga tagccgcgct gcctcgtctt gcagttcatt cagggcaccg gacaggtcgg
2281  tcttgacaaa aagaaccggg cgcccctgcg ctgacagccg gaacacggcg gcatcagagc
2341  agccgattgt ctgttgtgcc cagtcatagc cgaatagcct ctccacccaa gcggccggag
2401  aacctgcgtg caatccatct tgttcaatca tgcgaaacga tcctcatcct gtctcttgat
2461  cgatctttgc aaaagcctag gcctccaaaa aagcctcctc actacttctg gaatagctca
2521  gaggccgagg cggcctcggc ctctgcataa ataaaaaaaa ttagtcagcc atggggcgga
2581  gaatgggcgg aactgggcgg agttaggggc gggatgggcg gagttagggg cgggactatg
2641  gttgctgact aattgagatg catgctttgc atacttctgc ctgctgggga gcctggggac
2701  tttccacacc tggttgctga ctaattgaga tgcatgcttt gcatacttct gcctgctggg
2761  gagcctgggg actttccaca ccctaactga cacacattcc acagctggtt ctttccgcct
2821  caggactctt cctttttcaa tattattgaa gcatttatca gggttattgt ctcatgagcg
2881  gatacatatt tgaatgtatt tagaaaaata aacaaatagg ggttccgcgc acatttcccc
2941  gaaaagtgcc acctgacgcg ccctgtagcg gcgcattaag cgcggcgggt gtggtggtta
3001  cgcgcagcgt gaccgctaca cttgccagcg ccctagcgcc cgctcctttc gctttcttcc
3061  cttcctttct cgccacgttc gccggctttc cccgtcaagc tctaaatcgg gggctccctt
3121  tagggttccg atttagtgct ttacggcacc tcgaccccaa aaaacttgat tagggtgatg
3181  gttcacgtag tgggccatcg ccctgataga cggtttttcg ccctttgacg ttggagtcca
3241  cgttctttaa tagtggactc ttgttccaaa ctggaacaac actcaaccct atctcggtct
3301  attcttttga tttataaggg attttgccga tttcggccta ttggttaaaa aatgagctga
3361  tttaacaaaa atttaacgcg aattttaaca aaatattaac gcttacaatt tacgcg
```

IMG-800 Restriction Map:

	#sites	-- Bp position of recognition site --					
AccI	1	300					
AciI	46	315,	327,	371,	425,	453,	580
		599,	720,	830,	965,	974,	1208
		1281,	1348,	1413,	1495,	1561,	1564
		1633,	1689,	1715,	1731,	1781,	1786
		1826,	2066,	2069,	2170,	2234,	2328
		2391,	2530,	2576,	2587,	2597,	2609
		2618,	2630,	2815,	2878,	2925,	2968
		2982,	2985,	3013,	3040		
AflIII	2	380,	3412				
AluI	11	357,	547,	637,	683,	940,	1737
		2195,	2515,	2803,	3098,	3355	
AlwI	13	3,	4,	947,	1021,	1033,	1118
		1131,	1490,	1505,	1882,	2049,	2128
		2439					
AlwNI	2	791,	1199				
ApaLI	1	694					
ApoI	2	3369,	3380				
AvaII	4	324,	340,	1338,	1783		
BamHI	1	3					
BanI	3	2264,	2299,	3145			
BanII	3	1227,	1937,	3111			
BbeI	1	2299					
BbvI	13	285,	722,	787,	790,	996,	1222
		1675,	2062,	2155,	2196,	2238,	2339
		3004					
BceAI	5	866,	1402,	1889,	2325,	3143	
BciVI	3	589,	2090,	2880			
BfaI	8	297,	310,	337,	875,	1128,	1462
		2477,	3033				
BfrBI	2	2658,	2730				
BglI	1	2524					
BglII	1	365					
BlnI	2	1461,	2476				
BmrI	2	2359,	2592				
BpmI	2	1479,	1500				
BsaAI	3	131,	1996,	3184			
BsaBI	1	2439					
BsaHI	3	1518,	1597,	2299			
BsaI	1	1303					
BsaJI	15	7,	540,	1230,	1231,	1333,	1334
		1461,	1866,	2135,	2476,	2525,	2534
		2569,	2692,	2764			
BsaWI	4	586,	733,	1423,	2267		
BseMII	6	655,	1064,	1187,	1636,	2517,	2819
BseRI	1	2495					
BseSI	3	694,	2263,	2356			
BsiEI	2	717,	2392				
BsiHKAI	4	273,	694,	1999,	2189		
BslI	18	7,	396,	414,	580,	859,	1212
		1243,	1244,	1294,	1329,	1460,	1461
		1493,	1774,	2318,	2569,	2961,	3287
BsmAI	4	1304,	1432,	2451,	2869		
BsmFI	7	1337,	1521,	1630,	2162,	2632,	2696
		2768					
Bsp1286I	9	273,	694,	1227,	1937,	1999,	2189
		2263,	2356,	3111			
BspHI	2	1100,	2872				
BspMI	4	342,	1589,	2039,	2402		
BsrBI	5	313,	1633,	1687,	2876,	3040	
BsrDI	1	2072					
BsrI	7	783,	796,	913,	2159,	2360,	2592

		3270					
BssKI	13	407,	528,	541,	759,	1231,	1334
		1523,	1913,	2136,	2296,	2692,	2709
		2764					
BssSI	3	553,	1580,	1706			
BstAPI	3	1198,	2660,	2732			
BstBI	1	1617					
BstF5I	5	1509,	1963,	1988,	2445,	2612	
BstUI	14	426,	1007,	1280,	1349,	1412,	1496
		1934,	2235,	2926,	2957,	2981,	3001
		3377,	3413				
Bsu36I	2	1186,	2818				
BtgI	2	1866,	2569				
Cac8I	29	275,	346,	350,	354,	395,	432
		992,	1203,	1225,	1281,	1328,	1515
		1798,	1852,	1856,	1897,	1901,	1929
		1935,	2001,	2220,	2406,	2660,	2679
		2732,	2751,	3024,	3038,	3081	
Cfr10I	4	1515,	1798,	1979,	3081		
ClaI	1	2459					
Csp6I	2	123,	1995				
CviTI	68	(not expanded)					
DdeI	6	655,	1064,	1187,	1636,	2517,	2819
DpnI	18	4,	366,	947,	1022,	1033,	1041
		1119,	1131,	1490,	1506,	1882,	1960
		1969,	2050,	2128,	2439,	2458,	2462
DraI	4	173,	186,	1137,	1156		
DraIII	1	3184					
DrdI	3	482,	2271,	3227			
EaeI	4	1800,	1827,	2218,	2392		
EarI	4	21,	1739,	1949,	2826		
EciI	8	452,	598,	1785,	2575,	2586,	2596
		2617,	2814				
Eco52I	1	2392					
Eco57I	3	907,	1741,	2173			
Eco57MI	5	907,	1479,	1500,	1741,	2173	
EcoO109I	3	25,	339,	1200			
EcoRII	9	407,	528,	541,	1231,	1334,	1913
		2692,	2709,	2764			
EcoRV	1	374					
FauI	10	1281,	1347,	1413,	1494,	1632,	2169
		2609,	2630,	2985,	3039		
Fnu4HI	28	285,	424,	579,	722,	787,	790
		996,	1207,	1222,	1561,	1675,	1689
		1730,	1826,	2062,	2065,	2068,	2155
		2196,	2233,	2238,	2328,	2339,	2391
		2530,	2968,	2982,	3004		
FokI	5	1509,	1963,	1988,	2445,	2612	
FspI	1	2198					
HaeII	4	624,	2299,	3027,	3035		
HaeIII	18	27,	394,	405,	423,	857,	1202
		1235,	1292,	1801,	1828,	2219,	2393
		2480,	2523,	2532,	2538,	3193,	3335
HgaI	5	482,	1060,	1519,	1598,	2955	
HhaI	20	558,	625,	725,	899,	1008,	1411
		1497,	1673,	1933,	2199,	2236,	2300
		2308,	2927,	2958,	2971,	2980,	3002
		3028,	3036				
HincII	1	300					
HindIII	1	356					
HinfI	10	41,	751,	1533,	1570,	1628,	1680
		1814,	2824,	3234,	3256		
HinP1I	20	558,	625,	725,	899,	1008,	1411
		1497,	1673,	1933,	2199,	2236,	2300

		2308,	2927,	2958,	2971,	2980,	3002
		3028,	3036				
HphI	4	1124,	1240,	2113,	3174		
Hpy188I	10	492,	570,	923,	1057,	1536,	1637
		1990,	2334,	2518,	3127		
Hpy188III	20	309,	613,	747,	845,	943,	1026
		1100,	1581,	1650,	1683,	1773,	1817
		1873,	1956,	1965,	2281,	2454,	2507
		2820,	2872				
Hpy8I	6	105,	300,	694,	3181,	3236,	3253
Hpy99I	8	302,	481,	1214,	1599,	1876,	1891
		2185,	2213				
HpyCH4III	10	102,	210,	270,	413,	883,	1374
		1697,	1805,	1921,	3210		
HpyCH4IV	10	132,	137,	1083,	1216,	1997,	2184
		3075,	3185,	3228,	3240		
HpyCH4V	16	55,	167,	345,	353,	695,	991
		2061,	2075,	2250,	2409,	2468,	2544
		2659,	2668,	2731,	2740		
KasI	1	2299					
MaeIII	10	134,	213,	737,	800,	916,	1182
		1872,	2178,	2997,	3009		
MboII	10	21,	1030,	1121,	1273,	1473,	1640
		1740,	1950,	2827,	3055		
MluI	1	3412					
MlyI	5	751,	1628,	2824,	3234,	3256	
MnlI	21	24,	495,	552,	819,	1189,	1455
		1503,	1709,	1885,	2242,	2378,	2442
		2482,	2494,	2497,	2521,	2527,	2534
		2540,	2818,	3149			
MscI	1	2218					
MslI	1	1861					
MspA1I	4	720,	965,	2194,	2802		
MspI	16	587,	734,	760,	950,	1424,	1516
		1524,	1799,	1980,	2047,	2137,	2268
		2296,	2318,	2395,	3082		
MvaI	9	407,	528,	541,	1231,	1334,	1913
		2692,	2709,	2764			
MwoI	23	279,	427,	999,	1198,	1402,	1589
		1856,	1939,	2056,	2062,	2201,	2224
		2308,	2524,	2530,	2609,	2660,	2732
		2971,	2973,	3015,	3042,	3072	
NaeI	3	1515,	1798,	3081			
NarI	1	2299					
NciI	4	759,	1523,	2136,	2296		
NcoI	2	1866,	2569				
NdeI	1	201					
NgoMIV	3	1515,	1798,	3081			
NlaIII	14	38,	351,	381,	1101,	1485,	1841
		1867,	1898,	2084,	2429,	2570,	2661
		2733,	2873				
NlaIV	14	3,	410,	449,	1292,	1337,	1416
		2264,	2299,	2688,	2760,	2921,	3112
		3124,	3145				
NsiI	2	2658,	2730				
NspI	5	350,	380,	1897,	2660,	2732	
PciI	1	380					
PleI	5	751,	1628,	2824,	3234,	3256	
Ppu10I	2	2658,	2730				
PpuMI	1	339					
PshAI	1	318					
PsiI	1	3312					
PstI	1	344					
PvuII	2	2194,	2802				

RsaI	2	123,	1995				
RsrII	2	323,	1782				
SalI	1	300					
SapI	2	1738,	1948				
Sau3AI	18	4,	366,	947,	1022,	1033,	1041
		1119,	1131,	1490,	1506,	1882,	1960
		1969,	2050,	2128,	2439,	2458,	2462
Sau96I	9	26,	324,	340,	1201,	1234,	1292
		1338,	1783,	3192			
SbfI	1	343					
ScrFI	13	407,	528,	541,	759,	1231,	1334
		1523,	1913,	2136,	2296,	2692,	2709
		2764					
SexAI	1	2708					
SfaNI	9	468,	1670,	1860,	1945,	2009,	2076
		2331,	2657,	2729			
SfcI	4	344,	645,	836,	2963		
SfiI	1	2523					
SfoI	1	2299					
SmlI	4	486,	748,	1025,	1907		
SpeI	1	296					
SphI	4	350,	1897,	2660,	2732		
SspI	2	2839,	3392				
StuI	1	2479					
StyI	5	7,	1461,	1866,	2476,	2569	
TaiI	10	132,	137,	1083,	1216,	1997,	2184
		3075,	3185,	3228,	3240		
TaqI	13	229,	301,	480,	1318,	1573,	1618
		1809,	1971,	2007,	2031,	2187,	2460
		3151					
TatI	1	122					
TauI	15	424,	579,	1207,	1561,	1689,	1730
		1826,	2065,	2068,	2233,	2328,	2391
		2530,	2968,	2982			
TfiI	5	41,	1533,	1570,	1680,	1814	
Tru9I	14	94,	174,	187,	1086,	1138,	1143
		1157,	2976,	3247,	3345,	3362,	3373
		3385,	3396				
TseI	13	285,	722,	787,	790,	996,	1222
		1675,	2062,	2155,	2196,	2238,	2339
		3004					
Tsp45I	4	134,	1872,	2178,	3009		
Tsp509I	12	86,	92,	96,	151,	178,	1141
		2559,	2651,	2723,	3370,	3381,	3407
TspRI	4	782,	795,	1066,	2176		
Tth111I	1	2180					
VspI	1	93					
XbaI	1	309					
XhoII	9	3,	365,	1021,	1032,	1118,	1130
		1489,	1881,	2127			