

Figure 1

HA0_A-Bang-3007-15_H3N2	QKIPGNDNSTATLCIGHHVPNGTIVKTIITNDRIEVTNATELVQNSSIGEICDSPHQILD	60
HA0_A-HK-4801-14_H3N2	QKIPGNDNSTATLCIGHHVPNGTIVKTIITNDRIEVTNATELVQNSSIGEICDSPHQILD	60
HA0_A-Minn-40-15_H3N2	QKIPGNDNSTATLCIGHHVPNGTIVKTIITNDRIEVTNATELVQNSSIGEICDSPHQILD	60
HA0_A-Saus-1-16_H3N2	QKIPGNDNSTATLCIGHHVPNGTIVKTIITNDRIEVTNATELVQNSSIGEICDSPHQILD	60
HA0_A-Penn-09-15_H3N2	QKIPGNDNSTATLCIGHHVPNGTIVKTIITNDRIEVTNATELVQNSSIGEICDSPHQILD	60
HA0_A-Switz-9715293-13_H3N2	QKIPGNDNSTATLCIGHHVPNGTIVKTIITNDRIEVTNATELVQNSSIGEICDSPHQILD	60
HA0_A-Miss-16-16_H3N2	QKIPGNDNSTATLCIGHHVPNGTIVKTIITNDRIEVTNATELVQNSSIGEICDSPHQILD	60
HA0_A-Bang-3007-15_H3N2	GENCTLIDALLGDPQCDGFQNKKKWDLFVERSKAYSNICYPDYDVYASLSRSLVASSGTLEF	120
HA0_A-HK-4801-14_H3N2	GENCTLIDALLGDPQCDGFQNKKKWDLFVERSKAYSNICYPDYDVYASLSRSLVASSGTLEF	120
HA0_A-Minn-40-15_H3N2	GENCTLIDALLGDPQCDGFQNKKKWDLFVERSKAYSNICYPDYDVYASLSRSLVASSGTLEF	120
HA0_A-Saus-1-16_H3N2	GENCTLIDALLGDPQCDGFQNKKKWDLFVERSKAYSNICYPDYDVYASLSRSLVASSGTLEF	120
HA0_A-Penn-09-15_H3N2	GENCTLIDALLGDPQCDGFQNKKKWDLFVERSKAYSNICYPDYDVYASLSRSLVASSGTLEF	120
HA0_A-Switz-9715293-13_H3N2	GENCTLIDALLGDPQCDGFQNKKKWDLFVERSKAYSNICYPDYDVYASLSRSLVASSGTLEF	120
HA0_A-Miss-16-16_H3N2	GENCTLIDALLGDPQCDGFQNKKKWDLFVERSKAYSNICYPDYDVYASLSRSLVASSGTLEF	120
HA0_A-Bang-3007-15_H3N2	NNESFNWGTQNGTSACIRKSSSSFFSRNLNWLTHLNTYPALNVTVPNNEQFDKLIYW	180
HA0_A-HK-4801-14_H3N2	NNESFNWGTQNGTSACIRKSSSSFFSRNLNWLTHLNTYPALNVTVPNNEQFDKLIYW	180
HA0_A-Minn-40-15_H3N2	NNESFNWGTQNGTSACIRKSSSSFFSRNLNWLTHLNTYPALNVTVPNNEQFDKLIYW	180
HA0_A-Saus-1-16_H3N2	NNESFNWGTQNGTSACIRKSSSSFFSRNLNWLTHLNTYPALNVTVPNNEQFDKLIYW	180
HA0_A-Penn-09-15_H3N2	NNESFNWGTQNGTSACIRKSSSSFFSRNLNWLTHLNTYPALNVTVPNNEQFDKLIYW	180
HA0_A-Switz-9715293-13_H3N2	NNESFNWGTQNGTSACIRKSSSSFFSRNLNWLTHLNTYPALNVTVPNNEQFDKLIYW	180
HA0_A-Miss-16-16_H3N2	NNESFNWGTQNGTSACIRKSSSSFFSRNLNWLTHLNTYPALNVTVPNNEQFDKLIYW	180
HA0_A-Bang-3007-15_H3N2	GVHHPGTDKDOIFLYAPSSGRITVSTKRSQQAVIDPNIIGSRPRIRDIPSRISYWTIVKPG	240
HA0_A-HK-4801-14_H3N2	GVHHPGTDKDOIFLYAPSSGRITVSTKRSQQAVIDPNIIGSRPRIRDIPSRISYWTIVKPG	240
HA0_A-Minn-40-15_H3N2	GVHHPGTDKDOIFLYAPSSGRITVSTKRSQQAVIDPNIIGSRPRIRDIPSRISYWTIVKPG	240
HA0_A-Saus-1-16_H3N2	GVHHPGTDKDOIFLYAPSSGRITVSTKRSQQAVIDPNIIGSRPRIRDIPSRISYWTIVKPG	240
HA0_A-Penn-09-15_H3N2	GVHHPGTDKDOIFLYAPSSGRITVSTKRSQQAVIDPNIIGSRPRIRDIPSRISYWTIVKPG	240
HA0_A-Switz-9715293-13_H3N2	GVHHPGTDKDOIFLYAPSSGRITVSTKRSQQAVIDPNIIGSRPRIRDIPSRISYWTIVKPG	240
HA0_A-Miss-16-16_H3N2	GVHHPGTDKDOIFLYAPSSGRITVSTKRSQQAVIDPNIIGSRPRIRDIPSRISYWTIVKPG	240
HA0_A-Bang-3007-15_H3N2	DILLINSTGNLIAPRGYFKIRSGKSSIMRSAPIGKCKSECITPNGSIPNDKPFQNVNRI	300
HA0_A-HK-4801-14_H3N2	DILLINSTGNLIAPRGYFKIRSGKSSIMRSAPIGKCKSECITPNGSIPNDKPFQNVNRI	300
HA0_A-Minn-40-15_H3N2	DILLINSTGNLIAPRGYFKIRSGKSSIMRSAPIGKCKSECITPNGSIPNDKPFQNVNRI	300
HA0_A-Saus-1-16_H3N2	DILLINSTGNLIAPRGYFKIRSGKSSIMRSAPIGKCKSECITPNGSIPNDKPFQNVNRI	300
HA0_A-Penn-09-15_H3N2	DILLINSTGNLIAPRGYFKIRSGKSSIMRSAPIGKCKSECITPNGSIPNDKPFQNVNRI	300
HA0_A-Switz-9715293-13_H3N2	DILLINSTGNLIAPRGYFKIRSGKSSIMRSAPIGKCKSECITPNGSIPNDKPFQNVNRI	300
HA0_A-Miss-16-16_H3N2	DILLINSTGNLIAPRGYFKIRSGKSSIMRSAPIGKCKSECITPNGSIPNDKPFQNVNRI	300

Continuation of Fig 1

HA0_A-Bang-3007-15_H3N2	TYGACPRVYVHSTILKLAIGMNVPEQIRGIFGALGFTENGWGWGMYGFRHNSG	360
HA0_A-HK-4301-14_H3N2	TYGACPRVYVHSTILKLAIGMNVPEQIRGIFGALGFTENGWGWGMYGFRHNSG	360
HA0_A-Minn-40-15_H3N2	TYGACPRVYVHSTILKLAIGMNVPEQIRGIFGALGFTENGWGWGMYGFRHNSG	360
HA0_A-Saus-1-16_H3N2	TYGACPRVYVHSTILKLAIGMNVPEQIRGIFGALGFTENGWGWGMYGFRHNSG	360
HA0_A-Penn-09-15_H3N2	TYGACPRVYVHSTILKLAIGMNVPEQIRGIFGALGFTENGWGWGMYGFRHNSG	360
HA0_A-Switz-9715293-13_H3N2	TYGACPRVYVHSTILKLAIGMNVPEQIRGIFGALGFTENGWGWGMYGFRHNSG	360
HA0_A-Miss-16-16_H3N2	TYGACPRVYVHSTILKLAIGMNVPEQIRGIFGALGFTENGWGWGMYGFRHNSG	360
*****:***** ***** *****		
HA0_A-Bang-3007-15_H3N2	RGQAADLKSTQAAIDQINGKRLIIGKINEFHQIEKEFSEVEGRIQOLEKVEDIKIDL	420
HA0_A-HK-4301-14_H3N2	RGQAADLKSTQAAIDQINGKRLIIGKINEFHQIEKEFSEVEGRIQOLEKVEDIKIDL	420
HA0_A-Minn-40-15_H3N2	RGQAADLKSTQAAIDQINGKRLIIGKINEFHQIEKEFSEVEGRIQOLEKVEDIKIDL	420
HA0_A-Saus-1-16_H3N2	RGQAADLKSTQAAIDQINGKRLIIGKINEFHQIEKEFSEVEGRIQOLEKVEDIKIDL	420
HA0_A-Penn-09-15_H3N2	RGQAADLKSTQAAIDQINGKRLIIGKINEFHQIEKEFSEVEGRIQOLEKVEDIKIDL	420
HA0_A-Switz-9715293-13_H3N2	RGQAADLKSTQAAIDQINGKRLIIGKINEFHQIEKEFSEVEGRIQOLEKVEDIKIDL	420
HA0_A-Miss-16-16_H3N2	RGQAADLKSTQAAIDQINGKRLIIGKINEFHQIEKEFSEVEGRIQOLEKVEDIKIDL	420
*****:***** ***** *****		
HA0_A-Bang-3007-15_H3N2	WSYNAEILLVALENOHTIIDLIDSEMKLFEKTKQOLRENAEDMNGSCPKYHKCNACIGS	480
HA0_A-HK-4301-14_H3N2	WSYNAEILLVALENOHTIIDLIDSEMKLFEKTKQOLRENAEDMNGSCPKYHKCNACIGS	480
HA0_A-Minn-40-15_H3N2	WSYNAEILLVALENOHTIIDLIDSEMKLFEKTKQOLRENAEDMNGSCPKYHKCNACIGS	480
HA0_A-Saus-1-16_H3N2	WSYNAEILLVALENOHTIIDLIDSEMKLFEKTKQOLRENAEDMNGSCPKYHKCNACIGS	480
HA0_A-Penn-09-15_H3N2	WSYNAEILLVALENOHTIIDLIDSEMKLFEKTKQOLRENAEDMNGSCPKYHKCNACIGS	480
HA0_A-Switz-9715293-13_H3N2	WSYNAEILLVALENOHTIIDLIDSEMKLFEKTKQOLRENAEDMNGSCPKYHKCNACIGS	480
HA0_A-Miss-16-16_H3N2	WSYNAEILLVALENOHTIIDLIDSEMKLFEKTKQOLRENAEDMNGSCPKYHKCNACIGS	480
*****:***** ***** *****		
HA0_A-Bang-3007-15_H3N2	IRNGTYDHYRDEALNNRFOIKGVELKSGYKOWILWISFAISFLLCVALLEFTIMACQ	540
HA0_A-HK-4301-14_H3N2	IRNGTYDHYRDEALNNRFOIKGVELKSGYKOWILWISFAISFLLCVALLEFTIMACQ	540
HA0_A-Minn-40-15_H3N2	IRNGTYDHYRDEALNNRFOIKGVELKSGYKOWILWISFAISFLLCVALLEFTIMACQ	540
HA0_A-Saus-1-16_H3N2	IRNGTYDHYRDEALNNRFOIKGVELKSGYKOWILWISFAISFLLCVALLEFTIMACQ	540
HA0_A-Penn-09-15_H3N2	IRNGTYDHYRDEALNNRFOIKGVELKSGYKOWILWISFAISFLLCVALLEFTIMACQ	540
HA0_A-Switz-9715293-13_H3N2	IRNGTYDHYRDEALNNRFOIKGVELKSGYKOWILWISFAISFLLCVALLEFTIMACQ	540
HA0_A-Miss-16-16_H3N2	IRNGTYDHYRDEALNNRFOIKGVELKSGYKOWILWISFAISFLLCVALLEFTIMACQ	540
*** *****:***** ***** *****		
HA0_A-Bang-3007-15_H3N2	KNIRCNICI 550	
HA0_A-HK-4301-14_H3N2	KNIRCNICI 550	
HA0_A-Minn-40-15_H3N2	KNIRCNICI 550	
HA0_A-Saus-1-16_H3N2	KNIRCNICI 550	
HA0_A-Penn-09-15_H3N2	KNIRCNICI 550	
HA0_A-Switz-9715293-13_H3N2	KNIRCNICI 550	
HA0_A-Miss-16-16_H3N2	KNIRCNICI 550	

Figure 3

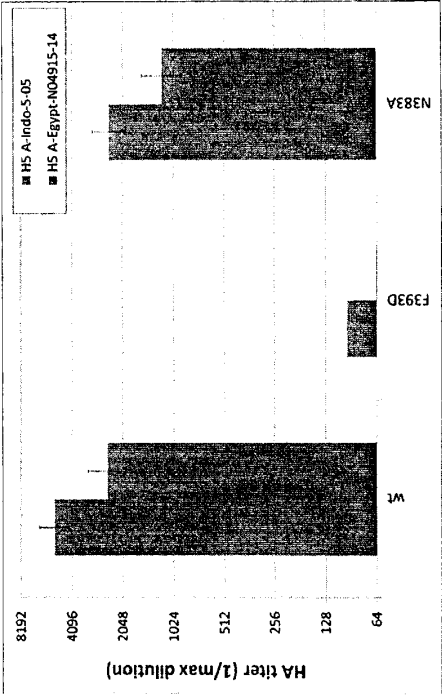


Figure 2

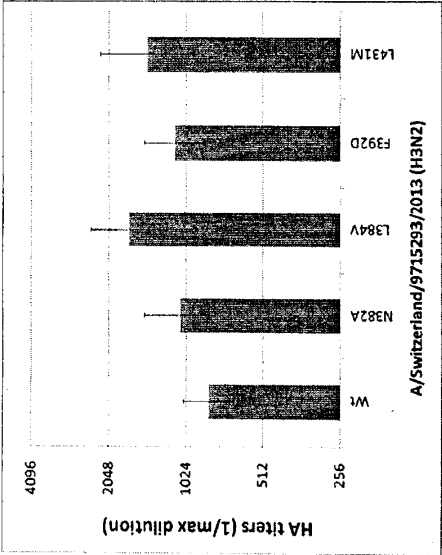


Figure 4B: Schematic representation of vector 3022

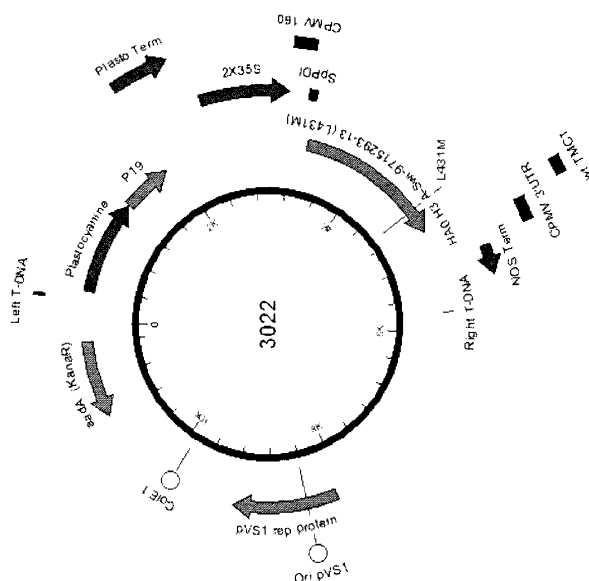


Figure 4A: Schematic representation of vector 3045

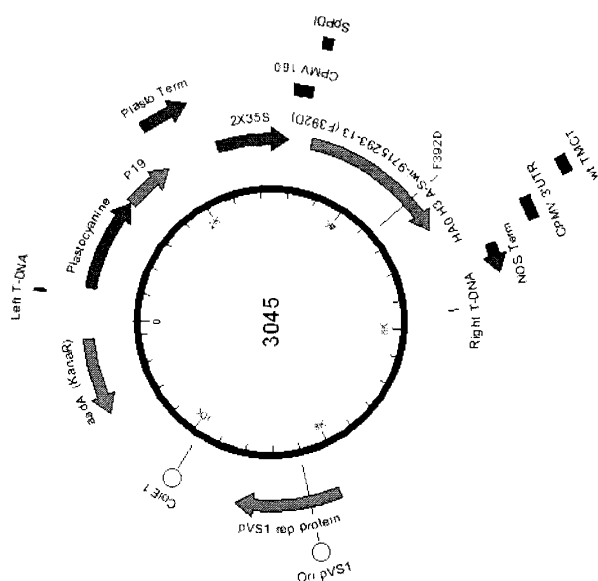


Figure 4D: Schematic representation of vector 3034

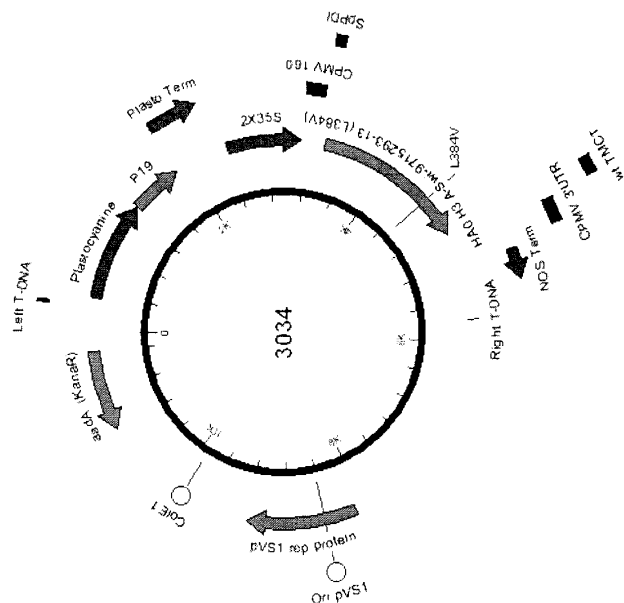


Figure 4C: Schematic representation of vector 3023

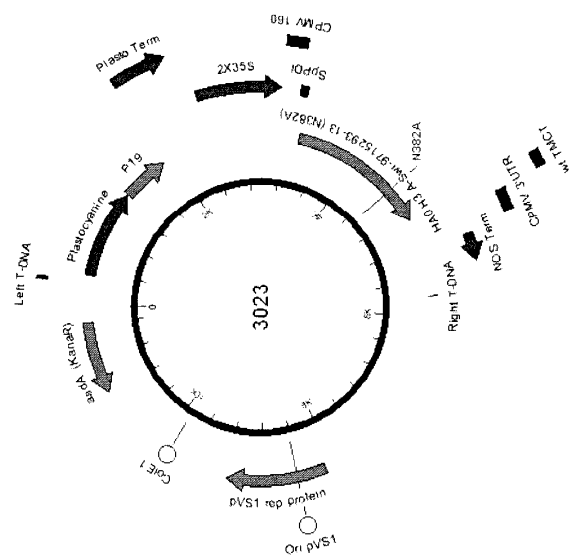


Figure 5B: Schematic representation of vector 1190

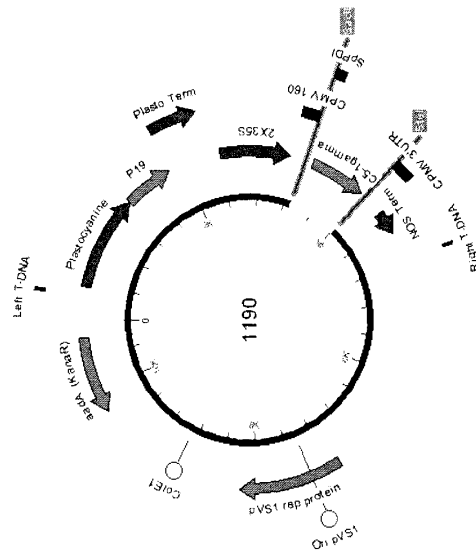


Figure 5A: Schematic representation of vector 3556

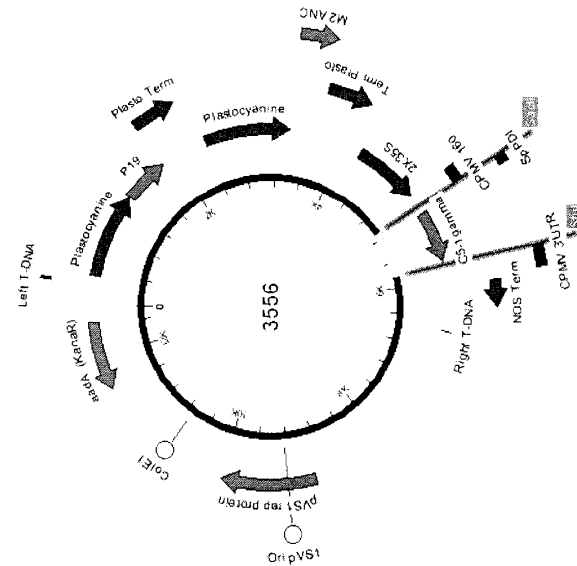


Figure 6B

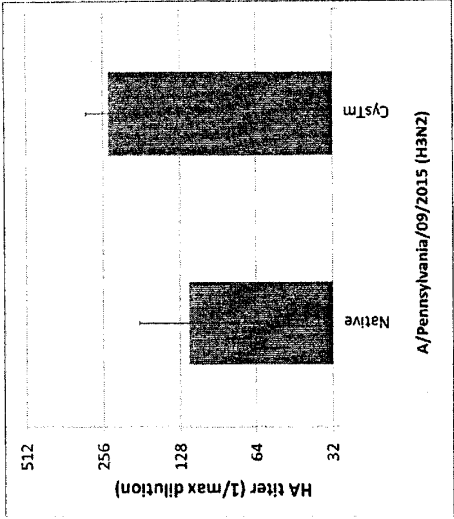


Figure 6A

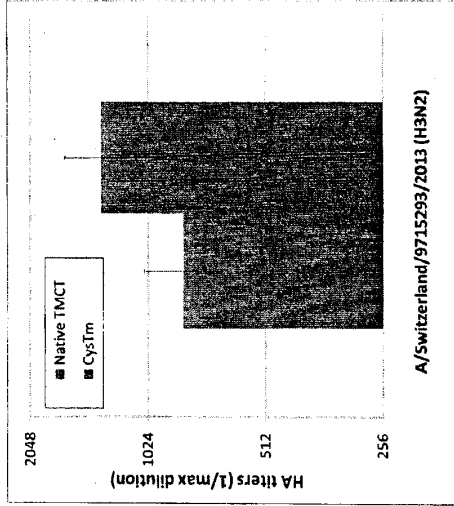


Figure 7C

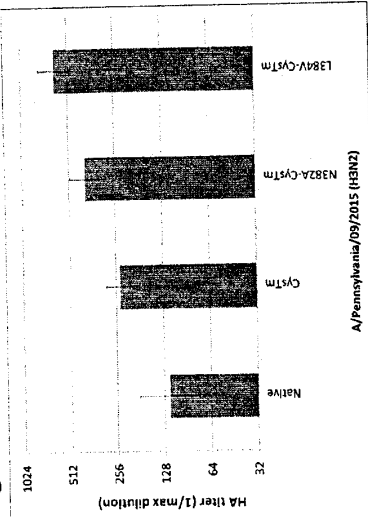


Figure 7D

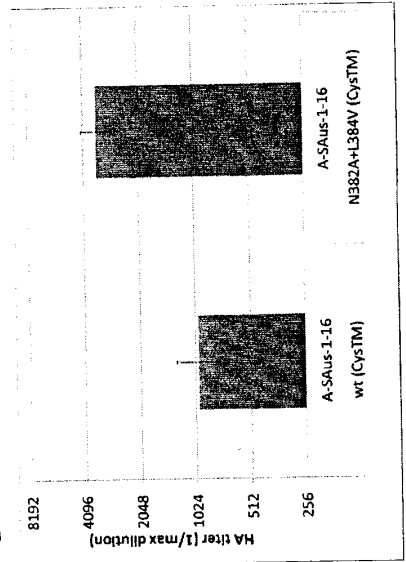


Figure 7A

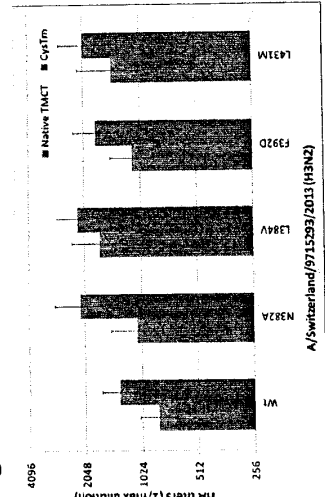


Figure 7B

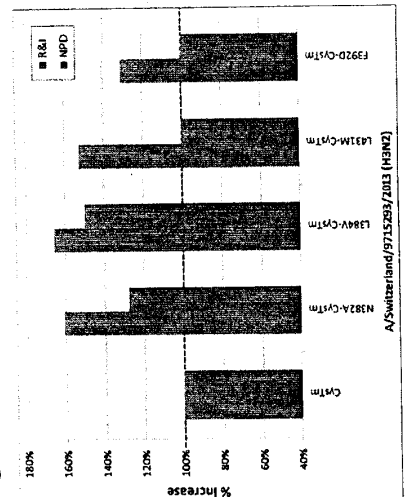


Figure 7E

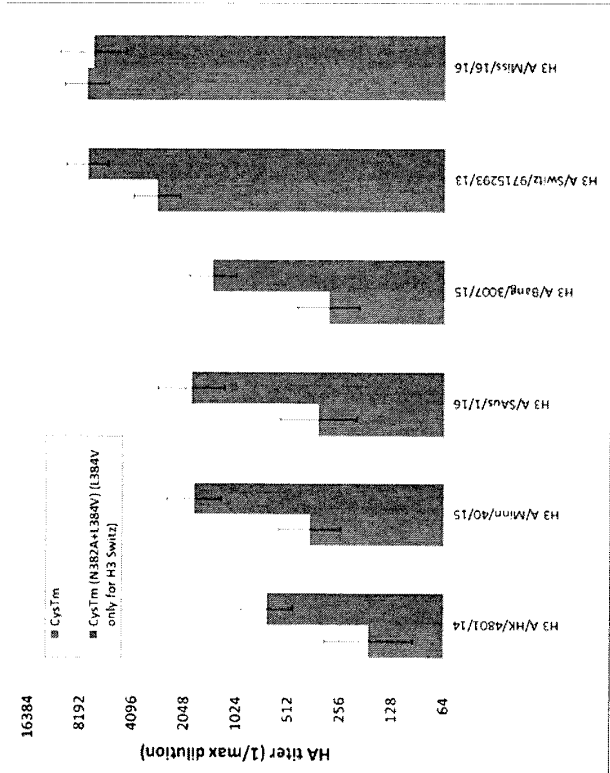


Figure 8B: Schematic representation of vector 3341

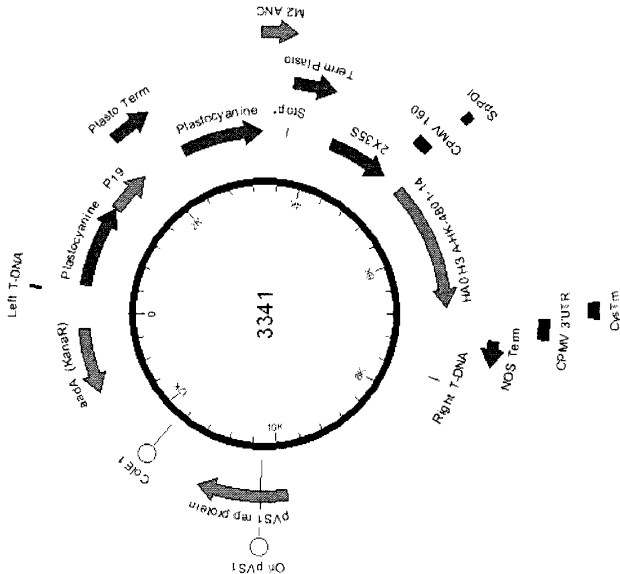


Figure 8A: Schematic representation of vector 3340

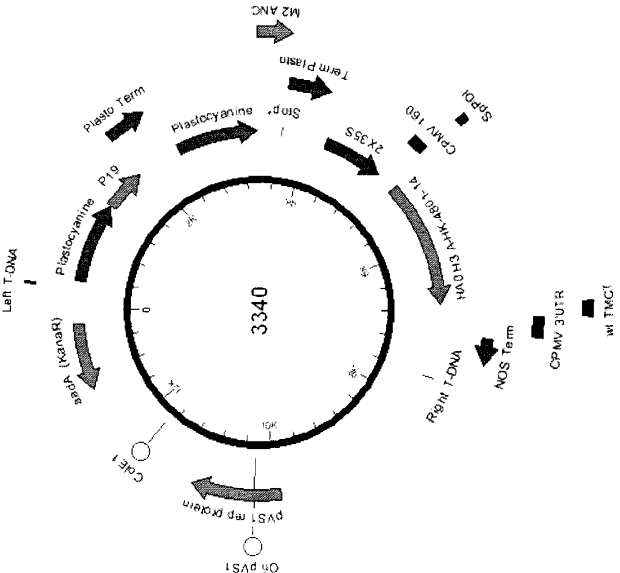


Figure 8D: Schematic representation of vector 3914

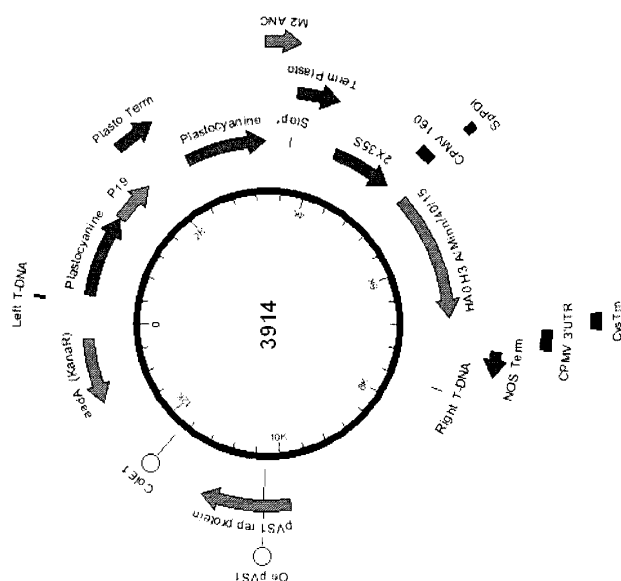


Figure 8C: Schematic representation of vector 3375

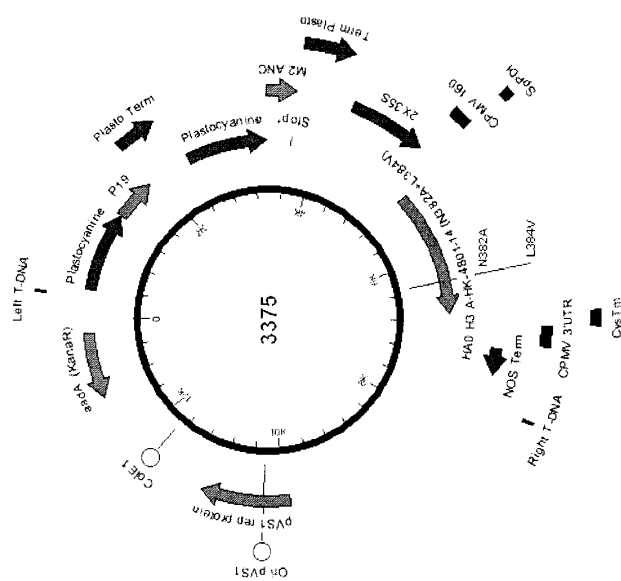


Figure 8F: Schematic representation of vector 3924

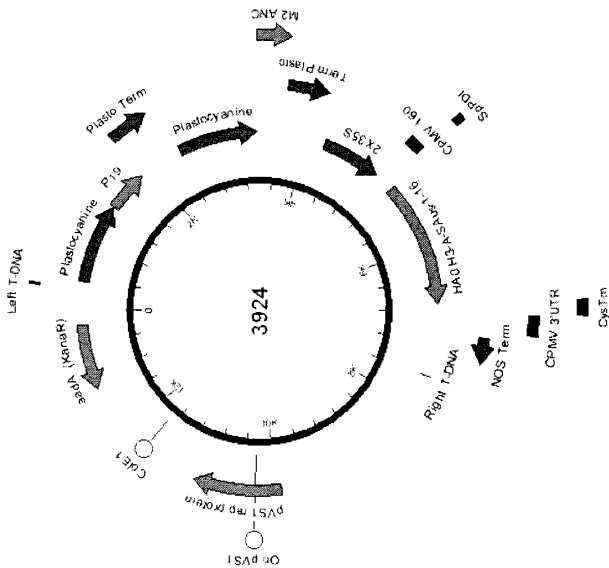


Figure 8E: Schematic representation of vector 3915

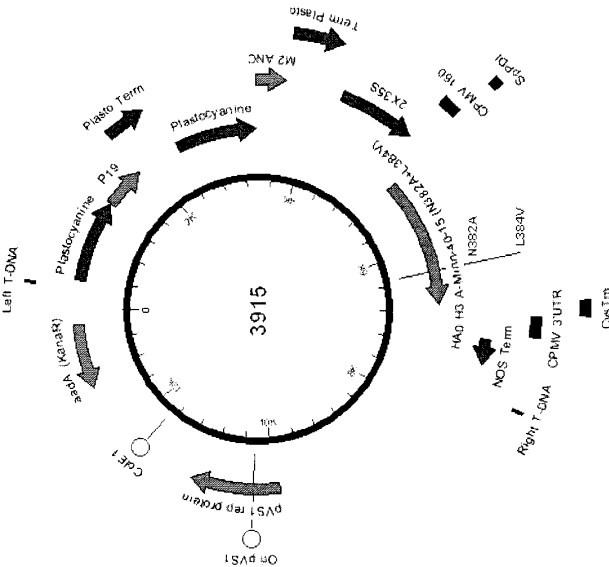


Figure 8H: Schematic representation of vector 3904

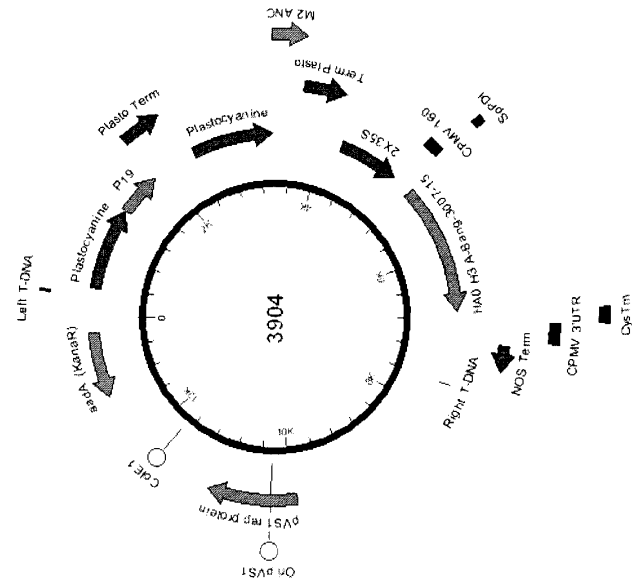


Figure 8G: Schematic representation of vector 3925

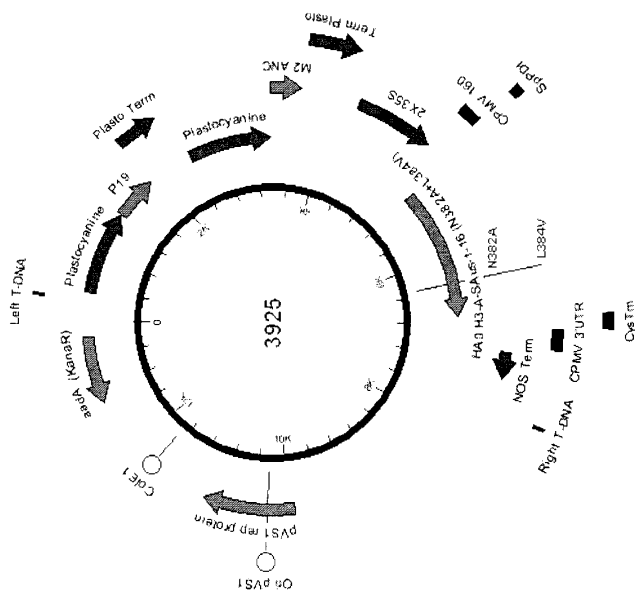


Figure 8J: Schematic representation of vector 2801

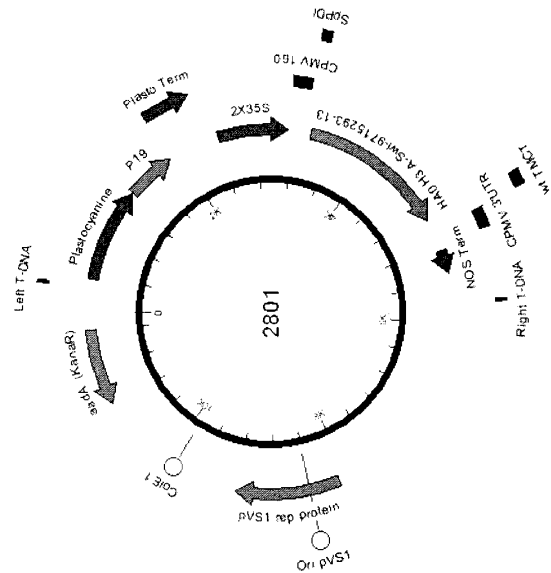


Figure 8I: Schematic representation of vector 3905

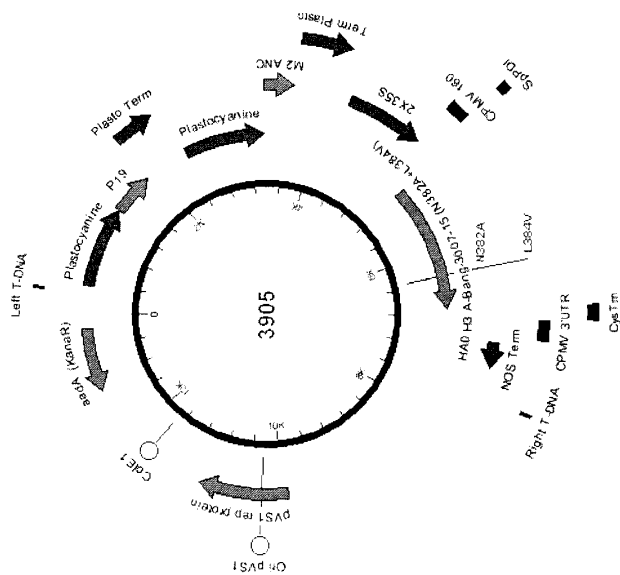


Figure 8L: Schematic representation of vector 3063

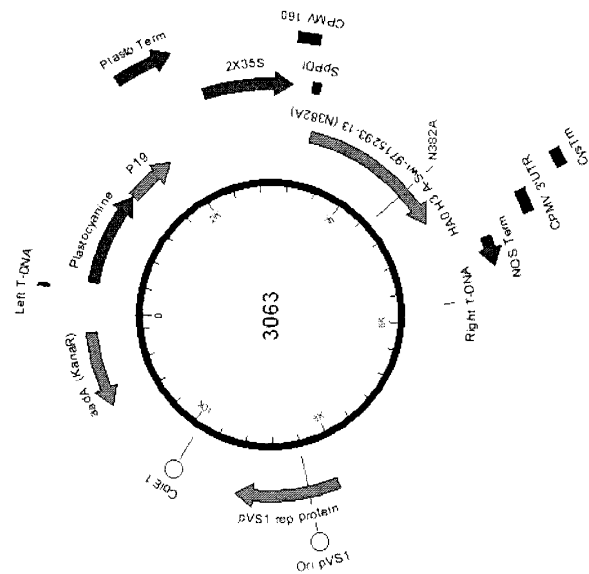


Figure 8K: Schematic representation of vector 2811

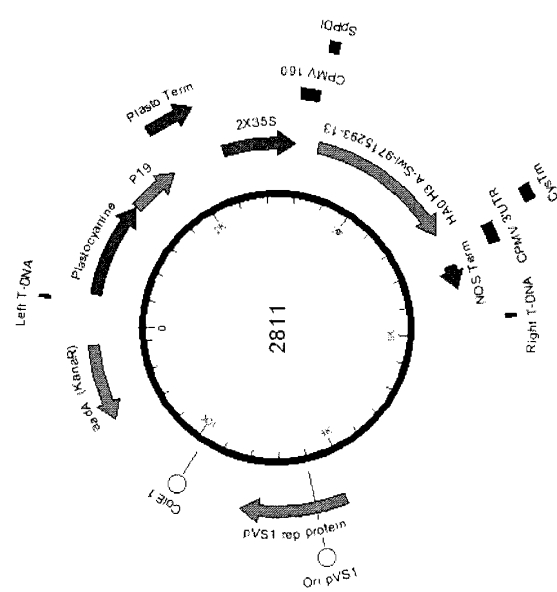


Figure 8N: Schematic representation of vector 3085

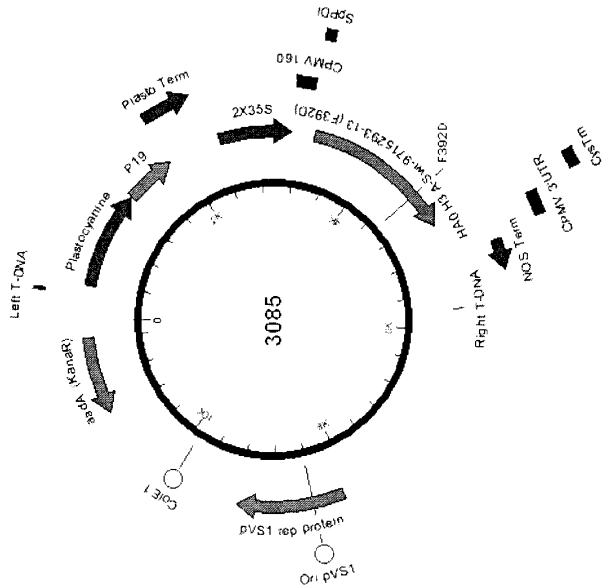


Figure 8M: Schematic representation of vector 3074

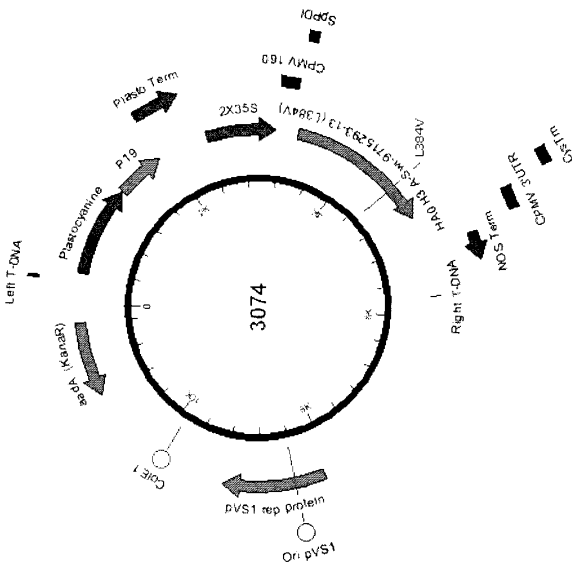


Figure 8P: Schematic representation of vector 3312

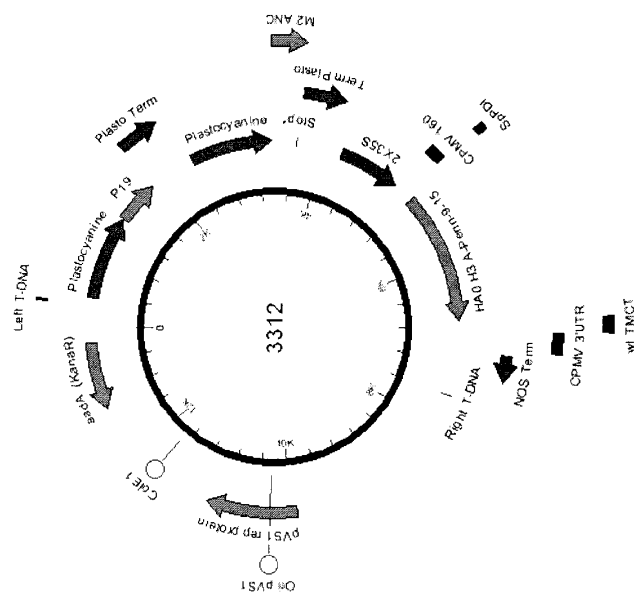


Figure 80: Schematic representation of vector 3062

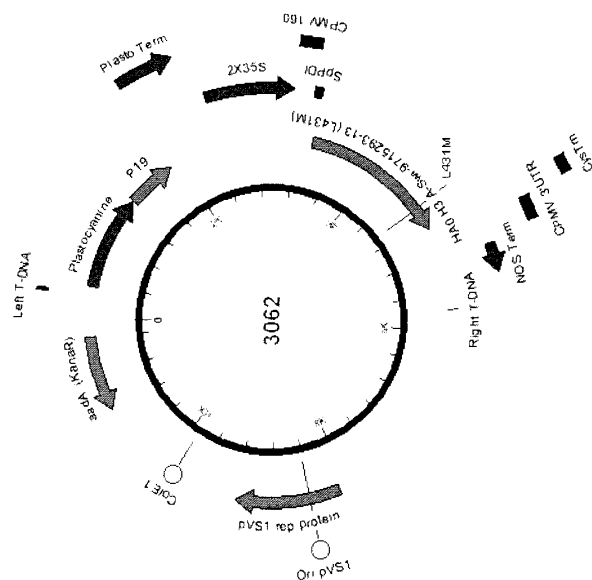


Figure 8Q: Schematic representation of vector 3313

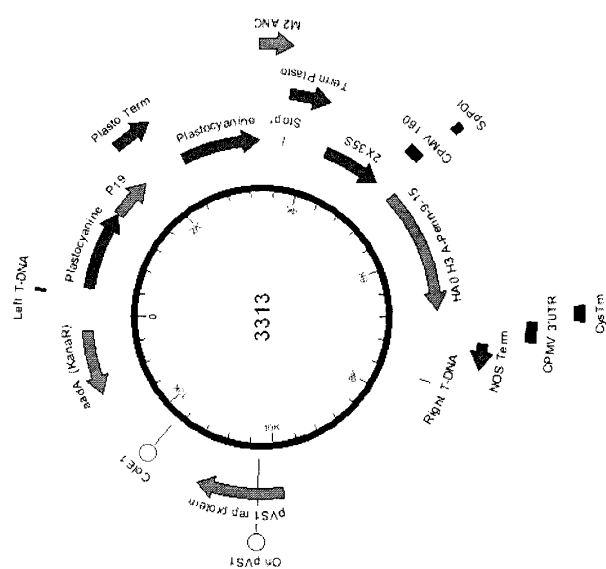


Figure 8S: Schematic representation of vector 3315

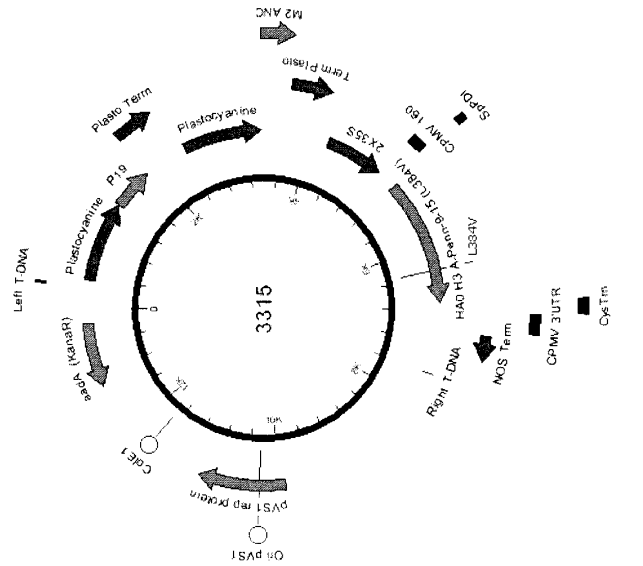


Figure 8R: Schematic representation of vector 3314

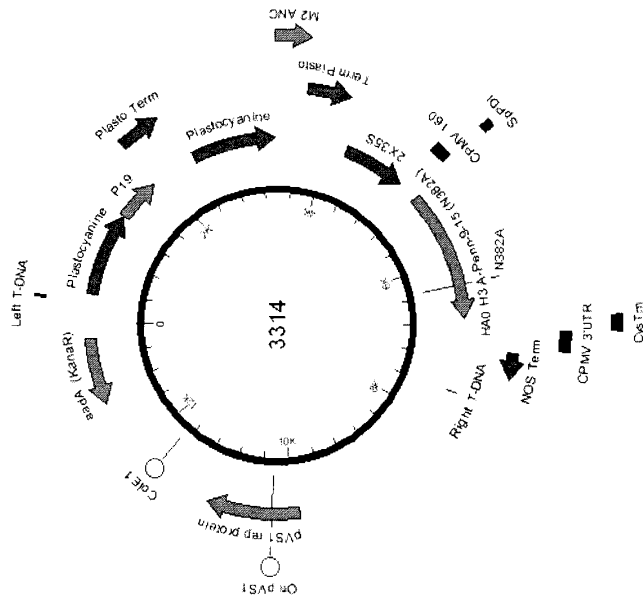


Figure 9B: Schematic representation of vector 3680

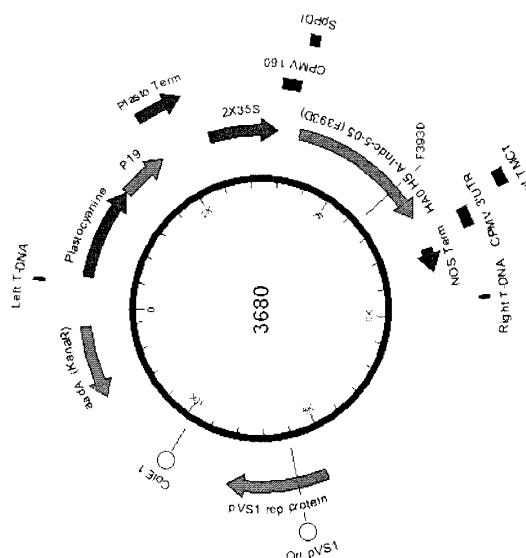


Figure 9A: Schematic representation of vector 2295

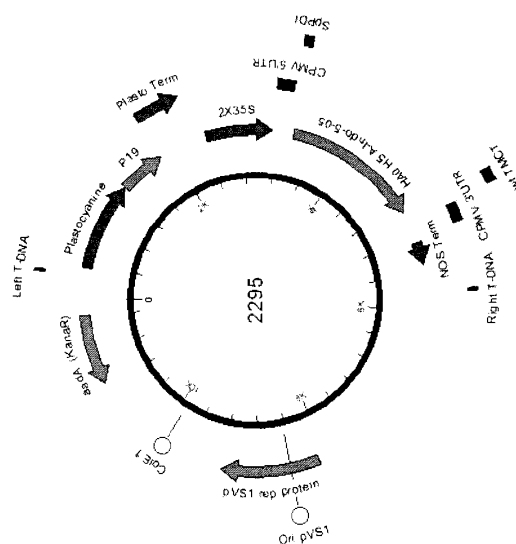


Figure 9D: Schematic representation of vector 3690

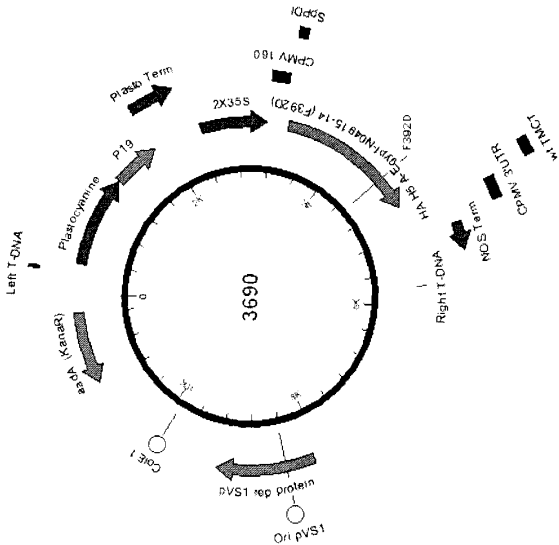


Figure 9C: Schematic representation of vector 3645

