Figure 1

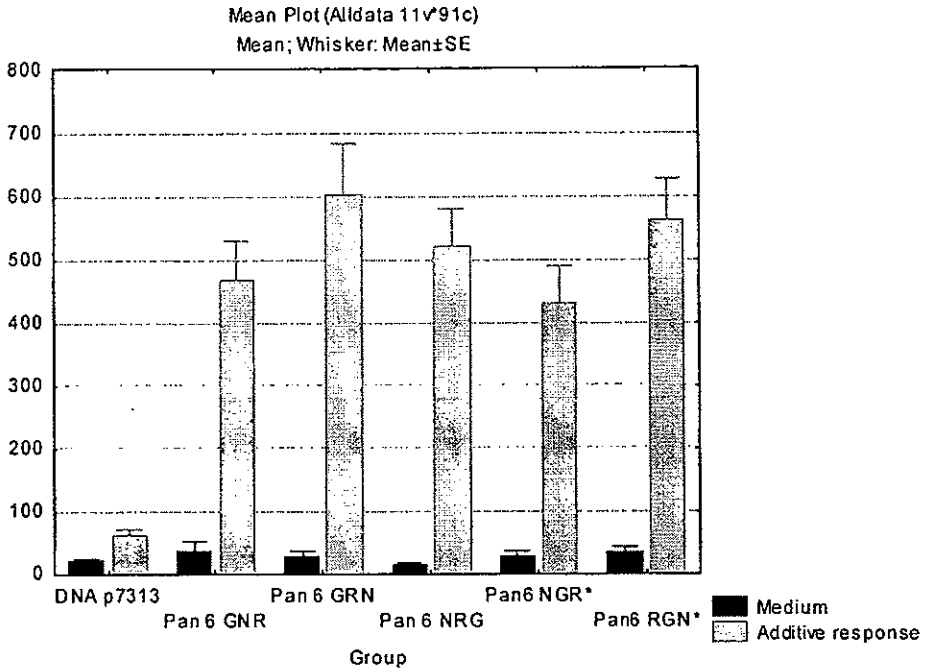


Figure 2

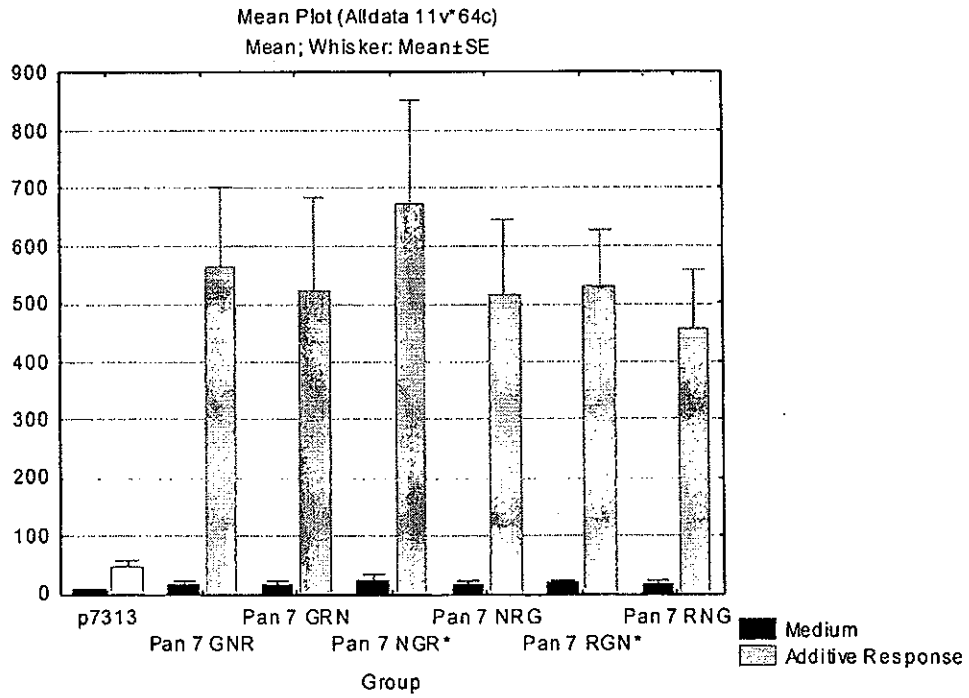


Figure 3

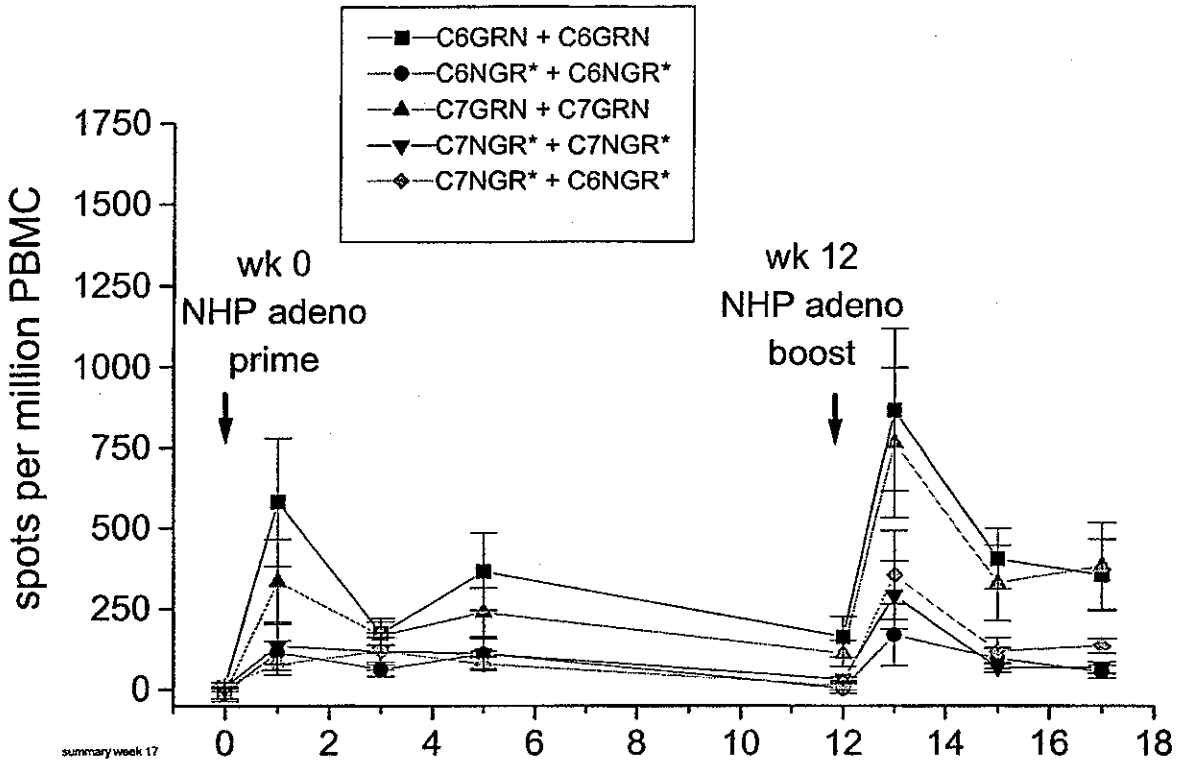
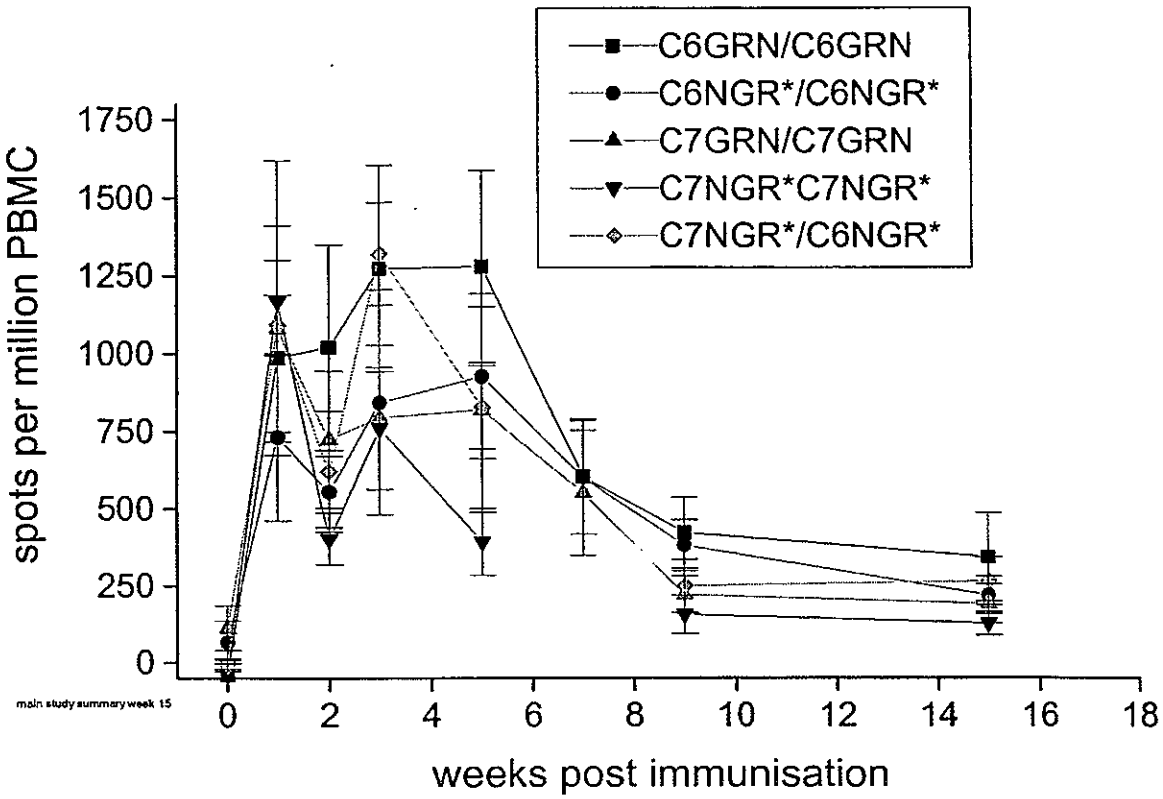

C6GRN + C6GRN
C6NGR* + C6NGR*
C7GRN + C7GRN
C7NGR* + C7NGR*
C7NGR* + C6NGR*
spots per million PBMC
1750
1500
1250
1000
750
500
250
0
wk 0
NHP adeno
prime
wk 12
NHP adeno
boost
0
2
4
6
8
10
12
14
16
18
summary week 17

Figure 4


C6GRN/C6GRN
C6NGR*/C6NGR*
C7GRN/C7GRN
C7NGR*C7NGR*
C7NGR*/C6NGR*
spots per million PBMC
1750
1500
1250
1000
750
500
250
0
main study summary week 15
0
2
4
6
8
10
12
14
16
18
weeks post immunisation

5

Figure 5

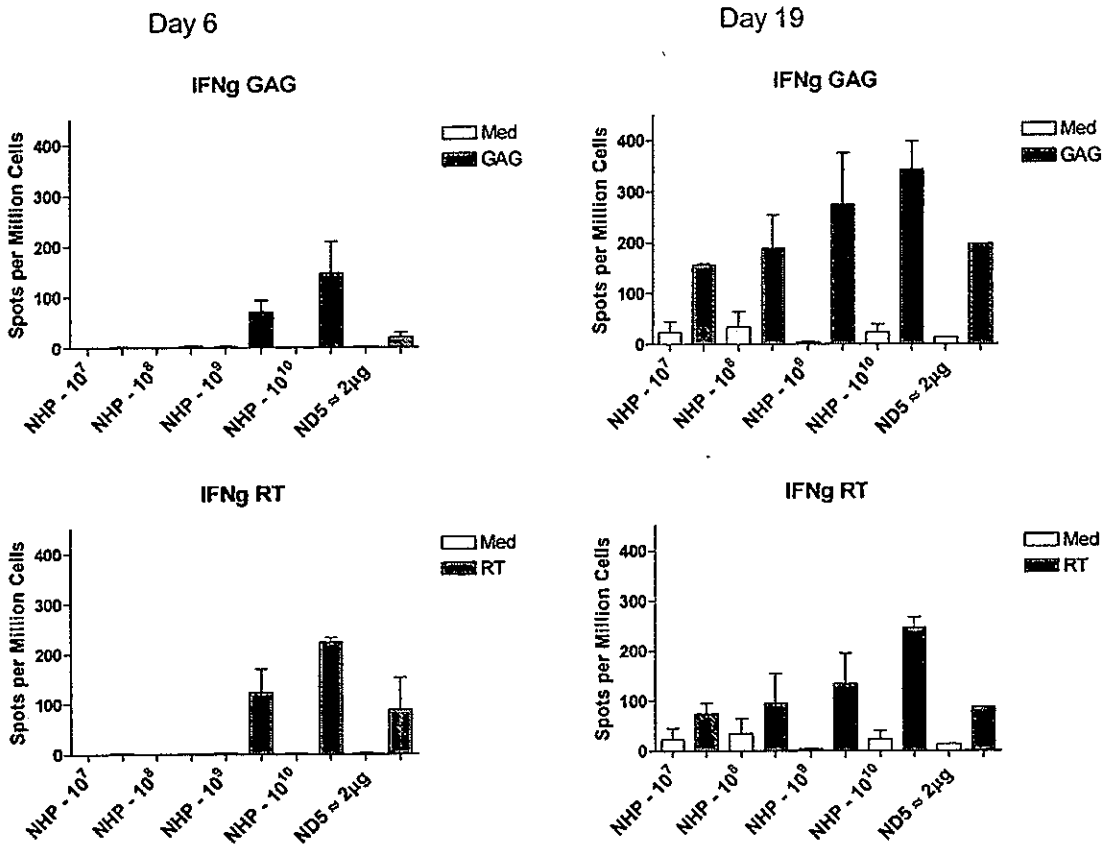


Figure 6

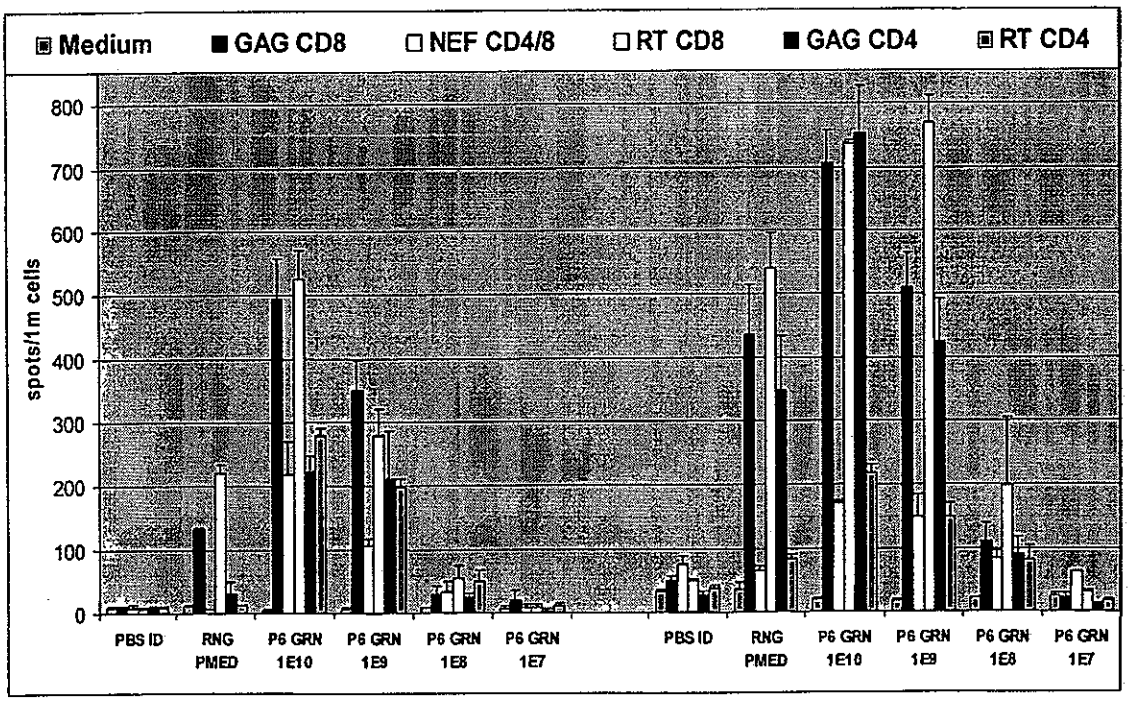


Figure 7

SEQ ID NO.1:

ATGGGTGCCCGAGCTTCGGTACTGTCTGGTGGAGAGCTGGACAGATGGGAGAAAATTAGGCTGCGCCCG
GGAGGCAAAAAGAAATACAAGCTCAAGCATATCGTGTGGGCCTCGAGGGAGCTTGAACGGTTTGCCGTG
AACCCAGGCCTGCTGGAAACATCTGAGGGATGTCGCCAGATCCTGGGGCAATTGCAGCCATCCCTCCAG
ACCGGGAGTGAAGAGCTGAGGTCCTTGTATAACACAGTGGCTACCCTCTACTGCGTACACCAGAGGATC
GAGATTAAGGATACCAAGGAGGCCTTGGACAAAATTGAGGAGGAGCAAAACAAGAGCAAGAAGAAGGCC
CAGCAGGCAGCTGCTGACACTGGGCATAGCAACCAGGTATCACAGAACTATCCTATTGTCCAAAACATT
CAGGGCCAGATGGTTCATCAGGCCATCAGCCCCCGGACGCTCAATGCCTGGGTGAAGGTTGTCGAAGAG
AAGGCCTTTTCTCCTGAGGTTATCCCCATGTTCTCCGCTTTGAGTGAGGGGGCCACTCCTCAGGACCTC
AATACAATGCTTAATACCGTGGGCGGCCATCAGGCCGCCATGCAAATGTTGAAGGAGACTATCAACGAG
GAGGCAGCCGAGTGGGACAGAGTGCATCCCGTCCACGCTGGCCCAATCGCGCCCGGACAGATGCGGGAG
CCTCGCGGCTCTGACATTGCCGGCACCACCTCTACACTGCAAGAGCAAATCGGATGGATGACCAACAAT
CCTCCCATCCCAGTTGGAGAAATCTATAAACGGTGGATCATCCTGGGCCTGAACAAGATCGTGCGCATG
TACTCTCCGACATCCATCCTTGACATTAGACAGGGACCCAAAGAGCCTTTTAGGGATTACGTCGACCGG
TTTTATAAGACCCTGCGAGCAGAGCAGGCCTCTCAGGAGGTCAAAAACTGGATGACGGAGACACTCCTG
GTACAGAACGCTAACCCCGACTGCAAAACAATCTTGAAGGCACTAGGCCCGGCTGCCACCCTGGAAGAG
ATGATGACCGCCTGTCAGGGAGTAGGCGGACCCGGACACAAAGCCAGAGTGTTGATGGGCCCCATCAGT
CCCATCGAGACCGTGCCGGTGAAGCTGAAACCCGGGATGGACGGCCCCAAGGTCAAGCAGTGGCCACTC
ACCGAGGAGAAGATCAAGGCCCTGGTGGAGATCTGCACCGAGATGGAGAAAGAGGGCAAGATCAGCAAG
ATCGGGCCTGAGAACCCATACAACACCCCCGTGTTTGCCATCAAGAAGAAGGACAGCACCAAGTGGCGC
AAGCTGGTGGATTTCCGGGAGCTGAATAAGCGGACCCAGGATTTCTGGGAGGTCCAGCTGGGCATCCCC
CATCCGGCCGGCCTGAAGAAGAAGAAGAGCGTGACCGTGCTGGACGTGGGCGACGCTTACTTCAGCGTC
CCTCTGGACGAGGACTTTAGAAAGTACACCGCCTTTACCATCCCATCTATCAACAACGAGACCCCTGGC
ATCAGATATCAGTACAACGTCCTCCCCCAGGGCTGGAAGGGCTCTCCCGCCATTTTCCAGAGCTCCATG
ACCAAGATCCTGGAGCCGTTTCGGAAGCAGAACCCCGATATCGTCATCTACCAGTACATGGACGACCTG
TACGTGGGCTCTGACCTGGAAATCGGGCAGCATCGCACGAAGATTGAGGAGCTGAGGCAGCATCTGCTG
AGATGGGGCCTGACCACTCCGGACAAGAAGCATCAGAAGGAGCCGCCATTCCTgaaGATGGGCTACGAG
CTCCATCCCGACAAGTGGACCGTGCAGCCTATCGTCCTCCCCGAGAAGGACAGCTGGACCGTGAACGAC
ATCCAGAAGCTGGTGGGCAAGCTCAACTGGGCTAGCCAGATCTATCCCGGGATCAAGGTGCGCCAGCTC
TGCAAGCTGCTGCGCGGCACCAAGGCCCTGACCGAGGTGATTCCCCTCACGGAGGAAGCCGAGCTCGAG
CTGGCTGAGAACCGGGAGATCCTGAAGGAGCCCGTGCACGGCGTGTACTATGACCCCTCCAAGGACCTG
ATCGCCGAAATCCAGAAGCAGGGCCAGGGGCAGTGGACATACCAGATTTACCAGGAGCCTTTCAAGAAC
CTCAAGACCGGCAAGTACGCCCGCATGAGGGGCGCCCACACCAACGATGTCAAGCAGCTGACCGAGGCC
GTCCAGAAGATCACGACCGAGTCCATCGTGATCTGGGGGAAGACACCCAAGTTCAAGCTGCCTATCCAG
AAGGAGACCTGGGAGACGTGGTGGACCGAATATTGGCAGGCCACCTGGATTCCCGAGTGGGAGTTCGTG
AATACACCTCCTCTGGTGAAGCTGTGGTACCAGCTCGAGAAGGAGCCCATCGTGGGCGCGGAGACATTC
TACGTGGACGGCGCGGCCAACCGCGAAACAAAGCTCGGGAAGGCCGGGTACGTCACCAACCGGGGCCGC
CAGAAGGTCGTCACCCTGACCGACACCACCAACCAGAAGACGGAGCTGCAGGCCATCTATCTCGCTCTC
CAGGACTCCGGCCTGGAGGTGAACATCGTGACGGACAGCCAGTACGCGCTGGGCATTATTCAGGCCCAG
CCGGACCAGTCCGAGAGCGAACTGGTGAACCAGATTATCGAGCAGCTGATCAAGAAAGAGAAGGTCTAC
CTCGCCTGGGTCCCGGCCCATAAGGGCATTGGCGGCAACGAGCAGGTCGACAAGCTGGTGAGTGCGGGG
ATTAGAAAGGTGCTGATGGTGGGTTTTCCAGTCACACCTCAGGTACCTTTAAGACCAATGACTTACAAG
GCAGCTGTAGATCTTAGCCACTTTTTAAAAGAAAAGGGGGGACTGGAAGGGCTAATTCACTCCCAAAGA
AGACAAGATATCCTTGATCTGTGGATCTACCACACACAAGGCTACTTCCCTGATTGGCAGAACTACACA
CCAGGGCCAGGGGTCAGATATCCACTGACCTTTGGATGGTGCTACAAGCTAGTACCAGTTGAGCCAGAT
AAGGTAGAAGAGGCCAATAAAGGAGAGAACACCAGCTTGTTACACCCTGTGAGCCTGCATGGGATGGAT
GACCCGGAGAGAGAAGTGTTAGAGTGGAGGTTTGACAGCCGCCTAGCATTTCATCACGTGGCCCGAGAG
CTGCATCCGGAGTACTTCAAGAACTGCTGA

SEQ ID NO.2:

MGARASVLSG GELDRWEKIR LRPGGKKKYK LKHIVWASRE LERFAVNPGL
LETSEGCRQI LGQLQPSLQT GSEELRSLYN TVATLYCVHQ RIEIKDTKEA
LDKIEEEQNK SKKKAQQAAA DTGHSNQVSQ NYPIVQNIQG QMVHQAISPR
TLNAWVKVVE EKAFSPEVIP MFSALSEGAT PQDLNTMLNT VGGHQAAMQM
LKETINEEAA EWDRVHPVHA GPIAPGQMRE PRGSDIAGTT STLQEQIGWM
TNNPPIPVGE IYKRWIILGL NKIVRMYSPT SILDIRQGPK EPFRDYVDRF
YKTLRAEQAS QEVKNWMTET LLVQNANPDC KTILKALGPA ATLEEMMTAC
QGVGGPGHKA RVLMGPISPI ETVPVKLKPG MDGPKVKQWP LTEEKIKALV

EICTEMEKEG KISKIGPENP YNTPVFAIKK KDSTKWRKLV DFRELNKRTQ
DFWEVQLGIP HPAGLKKKKS VTVLDVGDAY FSVPLDEDFR KYTAFTIPSI
NNETPGIRYQ YNVLPQGWKG SPAIFQSSMT KILEPFRKQN PDIVIYQYMD
DLYVGSDLEI GQHRTKIEEL RQHLLRWGLT TPDKKHQKEP PFLKMGYELH
PDKWTVQPIV LPEKDSWTVN DIQKLVGKLN WASQIYPGIK VRQLCKLLRG
TKALTEVIPL TEEAELELAE NREILKEPVH GVYYDPSKDL IAEIQKQGQG
QWTYQIYQEP FKNLKTGKYA RMRGAHTNDV KQLTEAVQKI TTESIVIWGK
TPKFKLPIQK ETWETWWTEY WQATWIPEWE FVNTPPLVKL WYQLEKEPIV
GAETFYVDGA ANRETKLGKA GYVTNRGRQK VVTLTDTTNQ KTELQAIYLA
LQDSGLEVNI VTDSQYALGI IQAQPDQSES ELVNQIIEQL IKKEKVYLAW
VPAHKGIGGN EQVDKLVSAG IRKVLMVGFP VTPQVPLRPM TYKAAVDLSH
FLKEKGGLEG LIHSQRRQDI LDLWIYHTQG YFPDWQNYTP GPGVRYPLTF
GWCYKLVPVE PDKVEEANKG ENTSLLHPVS LHGMDDPERE VLEWRFDSRL
AFHHVARELH PEYFKNC*

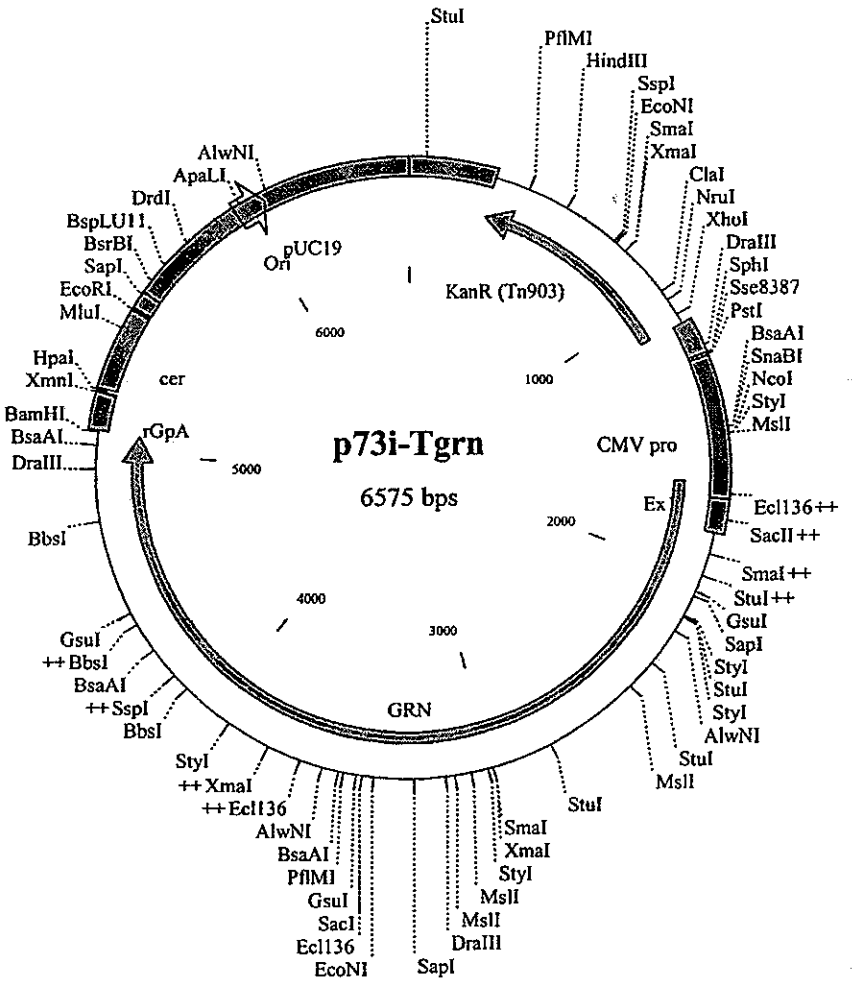


Figure 8

SEQ ID No.3

ATGGTGGGTTTTCCAGTCACACCTCAGGTACCTTTAAGACCAATGACTTACAAGGCAGCTGTAGATCTT
AGCCACTTTTTAAAAGAAAAGGGGGGACTGGAAGGGCTAATTCACTCCCAAAGAAGACAAGATATCCTT
GATCTGTGGATCTACCACACACAAGGCTACTTCCCTGATTGGCAGAACTACACACCAGGGCCAGGGGTC
AGATATCCACTGACCTTTGGATGGTGCTACAAGCTAGTACCAGTTGAGCCAGATAAGGTAGAAGAGGCC
AATAAAGGAGAGAACACCAGCTTGTTACACCCTGTGAGCCTGCATGGGATGGATGACCCGGAGAGAGAA
GTGTTAGAGTGGAGGTTTGACAGCCGCCTAGCATTTCATCACGTGGCCCGAGAGCTGCATCCGGAGTAC
TTCAAGAACTGCATGGGCCCCATCAGTCCCATCGAGACCGTGCCGGTGAAGCTGAAACCCGGGATGGAC
GGCCCCAAGGTCAAGCAGTGGCCACTCACCGAGGAGAAGATCAAGGCCCTGGTGGAGATCTGCACCGAG
ATGGAGAAAGAGGGCAAGATCAGCAAGATCGGGCCTGAGAACCCATACAACACCCCCGTGTTTGCCATC
AAGAAGAAGGACAGCACCAAGTGGCGCAAGCTGGTGGATTTCCGGGAGCTGAATAAGCGGACCCAGGAT
TTCTGGGAGGTCCAGCTGGGCATCCCCCATCCGGCCGGCCTGAAGAAGAAGAAGAGCGTGACCGTGCTG
GACGTGGGCGACGCTTACTTCAGCGTCCCTCTGGACGAGGACTTTAGAAAGTACACCGCCTTTACCATC
CCATCTATCAACAACGAGACCCCTGGCATCAGATATCAGTACAACGTCCTCCCCCAGGGCTGGAAGGGC
TCTCCCGCCATTTTCCAGAGCTCCATGACCAAGATCCTGGAGCCGTTTCGGAAGCAGAACCCCGATATC
GTCATCTACCAGTACATGGACGACCTGTACGTGGGCTCTGACCTGGAAATCGGGCAGCATCGCACGAAG
ATTGAGGAGCTGAGGCAGCATCTGCTGAGATGGGGCCTGACCACTCCGGACAAGAAGCATCAGAAGGAG
CCGCCATTCCTgaaGATGGGCTACGAGCTCCATCCCGACAAGTGGACCGTGCAGCCTATCGTCCTCCCC
GAGAAGGACAGCTGGACCGTGAACGACATCCAGAAGCTGGTGGGCAAGCTCAACTGGGCTAGCCAGATC
TATCCCGGGATCAAGGTGCGCCAGCTCTGCAAGCTGCTGCGCGGCACCAAGGCCCTGACCGAGGTGATT
CCCCTCACGGAGGAAGCCGAGCTCGAGCTGGCTGAGAACCGGGAGATCCTGAAGGAGCCCGTGCACGGC
GTGTACTATGACCCCTCCAAGGACCTGATCGCCGAAATCCAGAAGCAGGGCCAGGGGCAGTGGACATAC
CAGATTTACCAGGAGCCTTTCAAGAACCTCAAGACCGGCAAGTACGCCCGCATGAGGGGCGCCCACACC
AACGATGTCAAGCAGCTGACCGAGGCCGTCCAGAAGATCACGACCGAGTCCATCGTGATCTGGGGGAAG
ACACCCAAGTTCAAGCTGCCTATCCAGAAGGAGACCTGGGAGACGTGGTGGACCGAATATTGGCAGGCC
ACCTGGATTCCCGAGTGGGAGTTCGTGAATACACCTCCTCTGGTGAAGCTGTGGTACCAGCTCGAGAAG
GAGCCCATCGTGGGCGCGGAGACATTCTACGTGGACGGCGCGGCCAACCGCGAAACAAAGCTCGGGAAG
GCCGGGTACGTCACCAACCGGGGCCGCCAGAAGGTCGTCACCCTGACCGACACCACCAACCAGAAGACG
GAGCTGCAGGCCATCTATCTCGCTCTCCAGGACTCCGGCCTGGAGGTGAACATCGTGACGGACAGCCAG
TACGCGCTGGGCATTATTCAGGCCCAGCCGGACCAGTCCGAGAGCGAACTGGTGAACCAGATTATCGAG
CAGCTGATCAAGAAAGAGAAGGTCTACCTCGCCTGGGTCCCGGCCCATAAGGGCATTGGCGGCAACGAG
CAGGTCGACAAGCTGGTGAGTGCGGGGATTAGAAAGGTGCTGATGGGTGCCCGAGCTTCGGTACTGTCT
GGTGGAGAGCTGGACAGATGGGAGAAAATTAGGCTGCGCCCGGGAGGCAAAAAGAAATACAAGCTCAAG
CATATCGTGTGGGCCTCGAGGGAGCTTGAACGGTTTGCCGTGAACCCAGGCCTGCTGGAAACATCTGAG
GGATGTCGCCAGATCCTGGGGCAATTGCAGCCATCCCTCCAGACCGGGAGTGAAGAGCTGAGGTCCTTG
TATAACACAGTGGCTACCCTCTACTGCGTACACCAGAGGATCGAGATTAAGGATACCAAGGAGGCCTTG
GACAAAATTGAGGAGGAGCAAAACAAGAGCAAGAAGAAGGCCCAGCAGGCAGCTGCTGACACTGGGCAT
AGCAACCAGGTATCACAGAACTATCCTATTGTCCAAAACATTCAGGGCCAGATGGTTCATCAGGCCATC
AGCCCCCGGACGCTCAATGCCTGGGTGAAGGTTGTCGAAGAGAAGGCCTTTTCTCCTGAGGTTATCCCC
ATGTTCTCCGCTTTGAGTGAGGGGGCCACTCCTCAGGACCTCAATACAATGCTTAATACCGTGGGCGGC
CATCAGGCCGCCATGCAAATGTTGAAGGAGACTATCAACGAGGAGGCAGCCGAGTGGGACAGAGTGCAT
CCCGTCCACGCTGGCCCAATCGCGCCCGGACAGATGCGGGAGCCTCGCGGCTCTGACATTGCCGGCACC
ACCTCTACACTGCAAGAGCAAATCGGATGGATGACCAACAATCCTCCCATCCCAGTTGGAGAAATCTAT
AAACGGTGGATCATCCTGGGCCTGAACAAGATCGTGCGCATGTACTCTCCGACATCCATCCTTGACATT
AGACAGGGACCCAAAGAGCCTTTTAGGGATTACGTCGACCGGTTTTATAAGACCCTGCGAGCAGAGCAG
GCCTCTCAGGAGGTCAAAAACTGGATGACGGAGACACTCCTGGTACAGAACGCTAACCCCGACTGCAAA
ACAATCTTGAAGGCACTAGGCCCGGCTGCCACCCTGGAAGAGATGATGACCGCCTGTCAGGGAGTAGGC
GGACCCGGACACAAAGCCAGAGTGTTGTGA

SEQ ID NO. 4:

MVGFPVTPQV PLRPMTYKAA VDLSHFLKEK GGLEGLIHSQ RRQDILDLWI
YHTQGYFPDW QNYTPGPGVR YPLTFGWCYK LVPVEPDKVE EANKGENTSL
LHPVSLHGMD DPEREVLEWR FDSRLAFHHV ARELHPEYFK NCMGPISPIE
TVPVKLKPGM DGPKVKQWPL TEEKIKALVE ICTEMEKEGK ISKIGPENPY
NTPVFAIKKK DSTKWRKLVD FRELNKRTQD FWEVQLGIPH PAGLKKKKSV
TVLDVGDAYF SVPLDEDFRK YTAFTIPSIN NETPGIRYQY NVLPQGWKGS
PAIFQSSMTK ILEPFRKQNP DIVIYQYMDD LYVGSDLEIG QHRTKIEELR
QHLLRWGLTT PDKKHQKEPP FLKMGYELHP DKWTVQPIVL PEKDSWTVND
IQKLVGKLNW ASQIYPGIKV RQLCKLLRGT KALTEVIPLT EEAELELAEN
REILKEPVHG VYYDPSKDLI AEIQKQGQGQ WTYQIYQEPF KNLKTGKYAR

MRGAHTNDVK QLTEAVQKIT TESIVIWGKT PKFKLPIQKE TWETWWTEYW
QATWIPEWEF VNTPPLVKLW YQLEKEPIVG AETFYVDGAA NRETKLGKAG
YVTNRGRQKV VTLTDTTNQK TELQAIYLAL QDSGLEVNIV TDSQYALGII
QAQPDQSESE LVNQIIEQLI KKEKVYLAWV PAHKGIGGNE QVDKLVSAGI
RKVLMGARAS VLSGGELDRW EKIRLRPGGK KKYKLKHIVW ASRELERFAV
NPGLLETSEG CRQILGQLQP SLQTGSEELR SLYNTVATLY CVHQRIEIKD
TKEALDKIEE EQNKSKKKAQ QAAADTGHSN QVSQNYPIVQ NIQGQMVHQA
ISPRTLNAWV KVVEEKAFSP EVIPMFSALS EGATPQDLNT MLNTVGGHQA
AMQMLKETIN EEAAEWDRVH PVHAGPIAPG QMREPRGSDI AGTTSTLQEQ
IGWMTNNPPI PVGEIYKRWI ILGLNKIVRM YSPTSILDIR QGPKEPFRDY
VDRFYKTLRA EQASQEVKNW MTETLLVQNA NPDCKTILKA LGPAATLEEM

MTACQGVGGP GHKARVL*

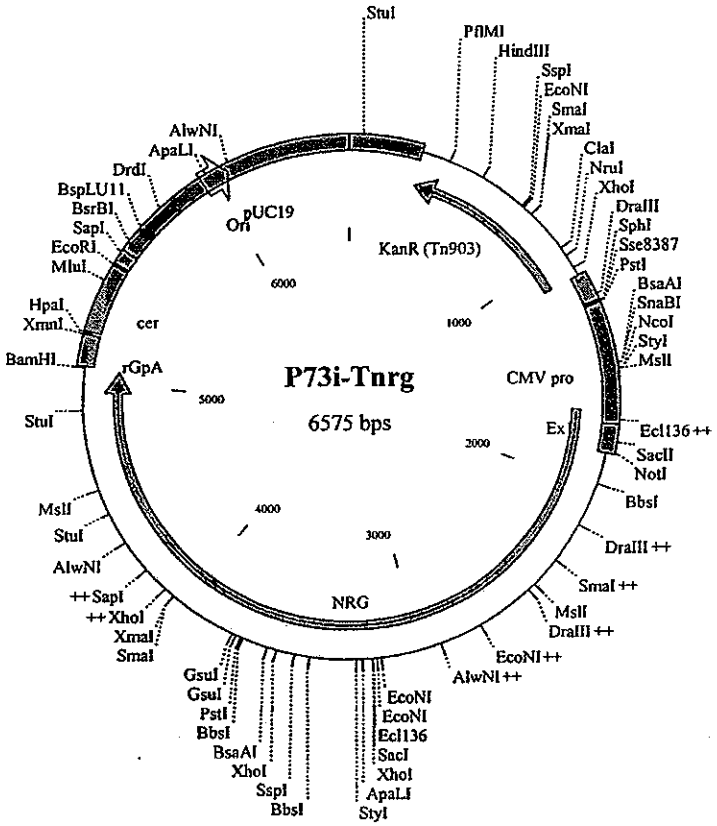


Figure 9

SEQ ID NO.5

ATGGTGGGTTTTCCAGTCACACCTCAGGTACCTTTAAGACCAATGACTTACAAGGCAGCTGT
AGATCTTAGCCACTTTTTAAAAGAAAAGGGGGGACTGGAAGGGCTAATTCACTCCCAAAGAA
GACAAGATATCCTTGATCTGTGGATCTACCACACACAAGGCTACTTCCCTGATTGGCAGAAC
TACACACCAGGGCCAGGGGTCAGATATCCACTGACCTTTGGATGGTGCTACAAGCTAGTACC
AGTTGAGCCAGATAAGGTAGAAGAGGCCAATAAAGGAGAGAACACCAGCTTGTTACACCCTG
TGAGCCTGCATGGGATGGATGACCCGGAGAGAGAAGTGTTAGAGTGGAGGTTTGACAGCCGC
CTAGCATTTCATCACGTGGCCCGAGAGCTGCATCCGGAGTACTTCAAGAACTGCATGGGTGC
CCGAGCTTCGGTACTGTCTGGTGGAGAGCTGGACAGATGGGAGAAAATTAGGCTGCGCCCGG
GAGGCAAAAAGAAATACAAGCTCAAGCATATCGTGTGGGCCTCGAGGGAGCTTGAACGGTTT
GCCGTGAACCCAGGCCTGCTGGAAACATCTGAGGGATGTCGCCAGATCCTGGGGCAATTGCA
GCCATCCCTCCAGACCGGGAGTGAAGAGCTGAGGTCCTTGTATAACACAGTGGCTACCCTCT
ACTGCGTACACCAGAGGATCGAGATTAAGGATACCAAGGAGGCCTTGGACAAAATTGAGGAG
GAGCAAAACAAGAGCAAGAAGAAGGCCCAGCAGGCAGCTGCTGACACTGGGCATAGCAACCA
GGTATCACAGAACTATCCTATTGTCCAAAACATTCAGGGCCAGATGGTTCATCAGGCCATCA
GCCCCCGGACGCTCAATGCCTGGGTGAAGGTTGTCGAAGAGAAGGCCTTTTCTCCTGAGGTT
ATCCCCATGTTCTCCGCTTTGAGTGAGGGGGCCACTCCTCAGGACCTCAATACAATGCTTAA
TACCGTGGGCGGCCATCAGGCCGCCATGCAAATGTTGAAGGAGACTATCAACGAGGAGGCAG
CCGAGTGGGACAGAGTGCATCCCGTCCACGCTGGCCCAATCGCGCCCGGACAGATGCGGGAG
CCTCGCGGCTCTGACATTGCCGGCACCACCTCTACACTGCAAGAGCAAATCGGATGGATGAC
CAACAATCCTCCCATCCCAGTTGGAGAAATCTATAAACGGTGGATCATCCTGGGCCTGAACA
AGATCGTGCGCATGTACTCTCCGACATCCATCCTTGACATTAGACAGGGACCCAAAGAGCCT
TTTAGGGATTACGTCGACCGGTTTTATAAGACCCTGCGAGCAGAGCAGGCCTCTCAGGAGGT
CAAAAACTGGATGACGGAGACACTCCTGGTACAGAACGCTAACCCCGACTGCAAAACAATCT
TGAAGGCACTAGGCCCGGCTGCCACCCTGGAAGAGATGATGACCGCCTGTCAGGGAGTAGGC
GGACCCGGACACAAAGCCAGAGTGTTGATGGGCCCCATCAGTCCCATCGAGACCGTGCCGGT
GAAGCTGAAACCCGGGATGGACGGCCCCAAGGTCAAGCAGTGGCCACTCACCGAGGAGAAGA
TCAAGGCCCTGGTGGAGATCTGCACCGAGATGGAGAAAGAGGGCAAGATCAGCAAGATCGGG
CCTGAGAACCCATACAACACCCCCGTGTTTGCCATCAAGAAGAAGGACAGCACCAAGTGGCG
CAAGCTGGTGGATTTCCGGGAGCTGAATAAGCGGACCCAGGATTTCTGGGAGGTCCAGCTGG
GCATCCCCCATCCGGCCGGCCTGAAGAAGAAGAAGAGCGTGACCGTGCTGGACGTGGGCGAC
GCTTACTTCAGCGTCCCTCTGGACGAGGACTTTAGAAAGTACACCGCCTTTACCATCCCATC
TATCAACAACGAGACCCCTGGCATCAGATATCAGTACAACGTCCTCCCCCAGGGCTGGAAGG
GCTCTCCCGCCATTTTCCAGAGCTCCATGACCAAGATCCTGGAGCCGTTTCGGAAGCAGAAC
CCCGATATCGTCATCTACCAGTACATGGACGACCTGTACGTGGGCTCTGACCTGGAAATCGG
GCAGCATCGCACGAAGATTGAGGAGCTGAGGCAGCATCTGCTGAGATGGGGCCTGACCACTC
CGGACAAGAAGCATCAGAAGGAGCCGCCATTCCTgaaGATGGGCTACGAGCTCCATCCCGAC
AAGTGGACCGTGCAGCCTATCGTCCTCCCCGAGAAGGACAGCTGGACCGTGAACGACATCCA
GAAGCTGGTGGGCAAGCTCAACTGGGCTAGCCAGATCTATCCCGGGATCAAGGTGCGCCAGC
TCTGCAAGCTGCTGCGCGGCACCAAGGCCCTGACCGAGGTGATTCCCCTCACGGAGGAAGCC
GAGCTCGAGCTGGCTGAGAACCGGGAGATCCTGAAGGAGCCCGTGCACGGCGTGTACTATGA
CCCCTCCAAGGACCTGATCGCCGAAATCCAGAAGCAGGGCCAGGGGCAGTGGACATACCAGA
TTTACCAGGAGCCTTTCAAGAACCTCAAGACCGGCAAGTACGCCCGCATGAGGGGCGCCCAC
ACCAACGATGTCAAGCAGCTGACCGAGGCCGTCCAGAAGATCACGACCGAGTCCATCGTGAT
CTGGGGGAAGACACCCAAGTTCAAGCTGCCTATCCAGAAGGAGACCTGGGAGACGTGGTGGA
CCGAATATTGGCAGGCCACCTGGATTCCCGAGTGGGAGTTCGTGAATACACCTCCTCTGGTG
AAGCTGTGGTACCAGCTCGAGAAGGAGCCCATCGTGGGCGCGGAGACATTCTACGTGGACGG
CGCGGCCAACCGCGAAACAAAGCTCGGGAAGGCCGGGTACGTCACCAACCGGGGCCGCCAGA
AGGTCGTCACCCTGACCGACACCACCAACCAGAAGACGGAGCTGCAGGCCATCTATCTCGCT
CTCCAGGACTCCGGCCTGGAGGTGAACATCGTGACGGACAGCCAGTACGCGCTGGGCATTAT
TCAGGCCCAGCCGGACCAGTCCGAGAGCGAACTGGTGAACCAGATTATCGAGCAGCTGATCA
AGAAAGAGAAGGTCTACCTCGCCTGGGTCCCGGCCCATAAGGGCATTGGCGGCAACGAGCAG
GTCGACAAGCTGGTGAGTGCGGGGATTAGAAAGGTGCTGTAA

SEQ ID NO.6:

MVGFPVTPQV PLRPMTYKAA VDLSHFLKEK GGLEGLIHSQ RRQDILDLWI
YHTQGYFPDW QNYTPGPGVR YPLTFGWCYK LVPVEPDKVE EANKGENTSL
LHPVSLHGMD DPEREVLEWR FDSRLAFHHV ARELHPEYFK NCMGARASVL
SGGELDRWEK IRLRPGGKKK YKLKHIVWAS RELERFAVNP GLLETSEGCR
QILGQLQPSL QTGSEELRSL YNTVATLYCV HQRIEIKDTK EALDKIEEEQ
NKSKKKAQQA AADTGHSNQV SQNYPIVQNI QGQMVHQAIS PRTLNAWVKV
VEEKAFSPEV IPMFSALSEG ATPQDLNTML NTVGGHQAAM QMLKETINEE
AAEWDRVHPV HAGPIAPGQM REPRGSDIAG TTSTLQEQIG WMTNNPPIPV
GEIYKRWIIL GLNKIVRMYS PTSILDIRQG PKEPFRDYVD RFYKTLRAEQ
ASQEVKNWMT ETLLVQNANP DCKTILKALG PAATLEEMMT ACQGVGGPGH
KARVLMGPIS PIETVPVKLK PGMDGPKVKQ WPLTEEKIKA LVEICTEMEK
EGKISKIGPE NPYNTPVFAI KKKDSTKWRK LVDFRELNKR TQDFWEVQLG
IPHPAGLKKK KSVTVLDVGD AYFSVPLDED FRKYTAFTIP SINNETPGIR
YQYNVLPQGW KGSPAIFQSS MTKILEPFRK QNPDIVIYQY MDDLYVGSDL
EIGQHRTKIE ELRQHLLRWG LTTPDKKHQK EPPFLKMGYE LHPDKWTVQP
IVLPEKDSWT VNDIQKLVGK LNWASQIYPG IKVRQLCKLL RGTKALTEVI
PLTEEAELEL AENREILKEP VHGVYYDPSK DLIAEIQKQG QGQWTYQIYQ
EPFKNLKTGK YARMRGAHTN DVKQLTEAVQ KITTESIVIW GKTPKFKLPI
QKETWETWWT EYWQATWIPE WEFVNTPPLV KLWYQLEKEP IVGAETFYVD
GAANRETKLG KAGYVTNRGR QKVVTLTDTT NQKTELQAIY LALQDSGLEV
NIVTDSQYAL GIIQAQPDQS ESELVNQIIE QLIKKEKVYL AWVPAHKGIG
GNEQVDKLVS AGIRKVL*

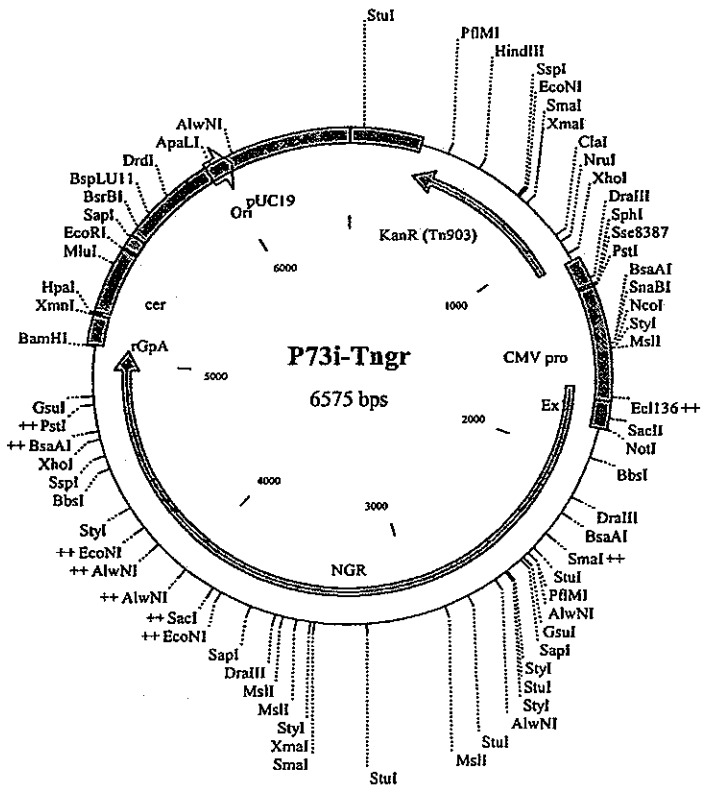


Figure 10

SEQ ID NO. 7:

```
ATGGGCCCCATCAGTCCCATCGAGACCGTGCCGGTGAAGCTGAAACCCGGGATGGACGGCCCCAAGGTC
AAGCAGTGGCCACTCACCGAGGAGAAGATCAAGGCCCTGGTGGAGATCTGCACCGAGATGGAGAAAGAG
GGCAAGATCAGCAAGATCGGGCCTGAGAACCCATACAACACCCCCGTGTTTGCCATCAAGAAGAAGGAC
AGCACCAAGTGGCGCAAGCTGGTGGATTTCCGGGAGCTGAATAAGCGGACCCAGGATTTCTGGGAGGTC
CAGCTGGGCATCCCCCATCCGGCCGGCCTGAAGAAGAAGAAGAGCGTGACCGTGCTGGACGTGGGCGAC
GCTTACTTCAGCGTCCCTCTGGACGAGGACTTTAGAAAGTACACCGCCTTTACCATCCCATCTATCAAC
AACGAGACCCCTGGCATCAGATATCAGTACAACGTCCTCCCCCAGGGCTGGAAGGGCTCTCCCGCCATT
TTCCAGAGCTCCATGACCAAGATCCTGGAGCCGTTTCGGAAGCAGAACCCCGATATCGTCATCTACCAG
TACATGGACGACCTGTACGTGGGCTCTGACCTGGAAATCGGGCAGCATCGCACGAAGATTGAGGAGCTG
AGGCAGCATCTGCTGAGATGGGGCCTGACCACTCCGGACAAGAAGCATCAGAAGGAGCCGCCATTCCTg
aaGATGGGCTACGAGCTCCATCCCGACAAGTGGACCGTGCAGCCTATCGTCCTCCCCGAGAAGGACAGC
TGGACCGTGAACGACATCCAGAAGCTGGTGGGCAAGCTCAACTGGGCTAGCCAGATCTATCCCGGGATC
AAGGTGCGCCAGCTCTGCAAGCTGCTGCGCGGCACCAAGGCCCTGACCGAGGTGATTCCCCTCACGGAG
GAAGCCGAGCTCGAGCTGGCTGAGAACCGGGAGATCCTGAAGGAGCCCGTGCACGGCGTGTACTATGAC
CCCTCCAAGGACCTGATCGCCGAAATCCAGAAGCAGGGCCAGGGGCAGTGGACATACCAGATTTACCAG
GAGCCTTTCAAGAACCTCAAGACCGGCAAGTACGCCCGCATGAGGGGCGCCCACACCAACGATGTCAAG
CAGCTGACCGAGGCCGTCCAGAAGATCACGACCGAGTCCATCGTGATCTGGGGGAAGACACCCAAGTTC
AAGCTGCCTATCCAGAAGGAGACCTGGGAGACGTGGTGGACCGAATATTGGCAGGCCACCTGGATTCCC
GAGTGGGAGTTCGTGAATACACCTCCTCTGGTGAAGCTGTGGTACCAGCTCGAGAAGGAGCCCATCGTG
GGCGCGGAGACATTCTACGTGGACGGCGCGGCCAACCGCGAAACAAAGCTCGGGAAGGCCGGGTACGTC
ACCAACCGGGGCCGCCAGAAGGTCGTCACCCTGACCGACACCACCAACCAGAAGACGGAGCTGCAGGCC
ATCTATCTCGCTCTCCAGGACTCCGGCCTGGAGGTGAACATCGTGACGGACAGCCAGTACGCGCTGGGC
ATTATTCAGGCCCAGCCGGACCAGTCCGAGAGCGAACTGGTGAACCAGATTATCGAGCAGCTGATCAAG
AAAGAGAAGGTCTACCTCGCCTGGGTCCCGGCCCATAAGGGCATTGGCGGCAACGAGCAGGTCGACAAG
CTGGTGAGTGCGGGGATTAGAAAGGTGCTGATGGGTGCCCGAGCTTCGGTACTGTCTGGTGGAGAGCTG
GACAGATGGGAGAAAATTAGGCTGCGCCCGGGAGGCAAAAAGAAATACAAGCTCAAGCATATCGTGTGG
GCCTCGAGGGAGCTTGAACGGTTTGCCGTGAACCCAGGCCTGCTGGAAACATCTGAGGGATGTCGCCAG
ATCCTGGGGCAATTGCAGCCATCCCTCCAGACCGGGAGTGAAGAGCTGAGGTCCTTGTATAACACAGTG
GCTACCCTCTACTGCGTACACCAGAGGATCGAGATTAAGGATACCAAGGAGGCCTTGGACAAAATTGAG
GAGGAGCAAAACAAGAGCAAGAAGAAGGCCCAGCAGGCAGCTGCTGACACTGGGCATAGCAACCAGGTA
TCACAGAACTATCCTATTGTCCAAAACATTCAGGGCCAGATGGTTCATCAGGCCATCAGCCCCCGGACG
CTCAATGCCTGGGTGAAGGTTGTCGAAGAGAAGGCCTTTTCTCCTGAGGTTATCCCCATGTTCTCCGCT
TTGAGTGAGGGGGCCACTCCTCAGGACCTCAATACAATGCTTAATACCGTGGGCGGCCATCAGGCCGCC
ATGCAAATGTTGAAGGAGACTATCAACGAGGAGGCAGCCGAGTGGGACAGAGTGCATCCCGTCCACGCT
GGCCCAATCGCGCCCGGACAGATGCGGGAGCCTCGCGGCTCTGACATTGCCGGCACCACCTCTACACTG
CAAGAGCAAATCGGATGGATGACCAACAATCCTCCCATCCCAGTTGGAGAAATCTATAAACGGTGGATC
ATCCTGGGCCTGAACAAGATCGTGCGCATGTACTCTCCGACATCCATCCTTGACATTAGACAGGGACCC
AAAGAGCCTTTTAGGGATTACGTCGACCGGTTTTATAAGACCCTGCGAGCAGAGCAGGCCTCTCAGGAG
GTCAAAAACTGGATGACGGAGACACTCCTGGTACAGAACGCTAACCCCGACTGCAAAACAATCTTGAAG
GCACTAGGCCCGGCTGCCACCCTGGAAGAGATGATGACCGCCTGTCAGGGAGTAGGCGGACCCGGACAC
AAAGCCAGAGTGTTGATGGTGGGTTTTCCAGTCACACCTCAGGTACCTTTAAGACCAATGACTTACAAG
GCAGCTGTAGATCTTAGCCACTTTTTAAAAGAAAAGGGGGGACTGGAAGGGCTAATTCACTCCCAAAGA
AGACAAGATATCCTTGATCTGTGGATCTACCACACACAAGGCTACTTCCCTGATTGGCAGAACTACACA
CCAGGGCCAGGGGTCAGATATCCACTGACCTTTGGATGGTGCTACAAGCTAGTACCAGTTGAGCCAGAT
AAGGTAGAAGAGGCCAATAAAGGAGAGAACACCAGCTTGTTACACCCTGTGAGCCTGCATGGGATGGAT
GACCCGGAGAGAGAAGTGTTAGAGTGGAGGTTTGACAGCCGCCTAGCATTTCATCACGTGGCCCGAGAG
CTGCATCCGGAGTACTTCAAGAACTGCTGA
```

SEQ ID NO.8:

```
MGPISPIETV PVKLKPGMDG PKVKQWPLTE EKIKALVEIC TEMEKEGKIS
KIGPENPYNT PVFAIKKKDS TKWRKLVDFR ELNKRTQDFW EVQLGIPHPA
GLKKKKSVTV LDVGDAYFSV PLDEDFRKYT AFTIPSINNE TPGIRYQYNV
LPQGWKGSPA IFQSSMTKIL EPFRKQNPDI VIYQYMDDLY VGSDLEIGQH
RTKIEELRQH LLRWGLTTPD KKHQKEPPFL KMGYELHPDK WTVQPIVLPE
KDSWTVNDIQ KLVGKLNWAS QIYPGIKVRQ LCKLLRGTKA LTEVIPLTEE
AELELAENRE ILKEPVHGVY YDPSKDLIAE IQKQGQGQWT YQIYQEPFKN
LKTGKYARMR GAHTNDVKQL TEAVQKITTE SIVIWGKTPK FKLPIQKETW
ETWWTEYWQA TWIPEWEFVN TPPLVKLWYQ LEKEPIVGAE TFYVDGAANR
ETKLGKAGYV TNRGRQKVVT LTDTTNQKTE LQAIYLALQD SGLEVNIVTD
SQYALGIIQA QPDQSESELV NQIIEQLIKK EKVYLAWVPA HKGIGGNEQV
```

DKLVSAGIRK VLMGARASVL SGGELDRWEK IRLRPGGKKK YKLKHIVWAS
RELERFAVNP GLLETSEGCR QILGQLQPSL QTGSEELRSL YNTVATLYCV
HQRIEIKDTK EALDKIEEEQ NKSKKKAQQA AADTGHSNQV SQNYPIVQNI
QGQMVHQAIS PRTLNAWVKV VEEKAFSPEV IPMFSALSEG ATPQDLNTML
NTVGGHQAAM QMLKETINEE AAEWDRVHPV HAGPIAPGQM REPRGSDIAG
TTSTLQEQIG WMTNNPPIPV GEIYKRWIIL GLNKIVRMYS PTSILDIRQG
PKEPFRDYVD RFYKTLRAEQ ASQEVKNWMT ETLLVQNANP DCKTILKALG
PAATLEEMMT ACQGVGGPGH KARVLMVGFP VTPQVPLRPM TYKAAVDLSH
FLKEKGGLEG LIHSQRRQDI LDLWIYHTQG YFPDWQNYTP GPGVRYPLTF
GWCYKLVPVE PDKVEEANKG ENTSLLHPVS LHGMDDPERE VLEWRFDSRL
AFHHVARELH PEYFKNC *

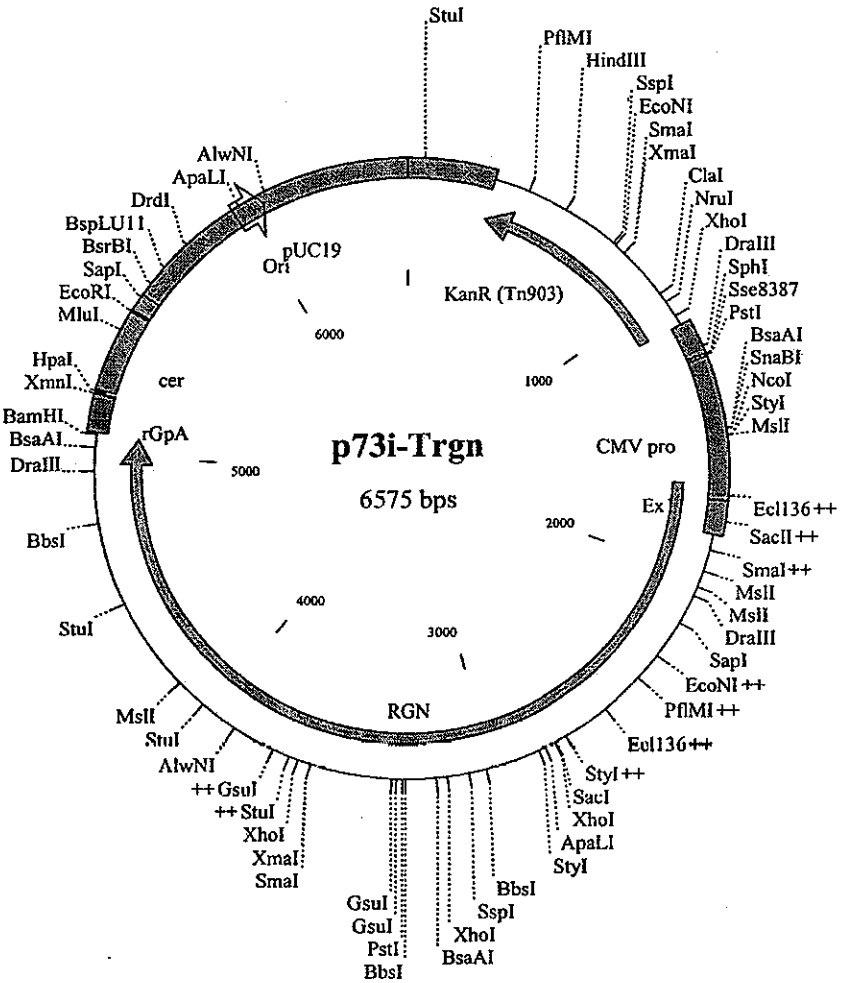


Figure 11

SEQ ID NO.9:

ATGGGCCCCATCAGTCCCATCGAGACCGTGCCGGTGAAGCTGAAACCCGGGATGGACGGCCCCAAGGTC
AAGCAGTGGCCACTCACCGAGGAGAAGATCAAGGCCCTGGTGGAGATCTGCACCGAGATGGAGAAAGAG
GGCAAGATCAGCAAGATCGGGCCGGAGAACCCATACAACACCCCCGTGTTTGCCATCAAGAAGAAGGAC
AGCACCAAGTGGCGCAAGCTGGTGGATTTCCGGGAGCTGAATAAGCGGACCCAGGATTTCTGGGAGGTC
CAGCTGGGCATCCCCCATCCGGCCGGCCTGAAGAAGAAGAAGAGCGTGACCGTGCTGGACGTGGGCGAC
GCTTACTTCAGCGTCCCTCTGGACGAGGACTTTAGAAAGTACACCGCCTTTACCATCCCATCTATCAAC
AACGAGACCCCTGGCATCAGATATCAGTACAACGTCCTCCCCCAGGGCTGGAAGGGCTCTCCCGCCATT
TTCCAGAGCTCCATGACCAAGATCCTGGAGCCGTTTCGGAAGCAGAACCCCGATATCGTCATCTACCAG
TACATGGACGACCTGTACGTGGGCTCTGACCTGGAAATCGGGCAGCATCGCACGAAGATTGAGGAGCTG
AGGCAGCATCTGCTGAGATGGGGCCTGACCACTCCGGACAAGAAGCATCAGAAGGAGCCGCCATTCCTg
aaGATGGGCTACGAGCTCCATCCCGACAAGTGGACCGTGCAGCCTATCGTCCTCCCCGAGAAGGACAGC
TGGACCGTGAACGACATCCAGAAGCTGGTGGGCAAGCTCAACTGGGCTAGCCAGATCTATCCCGGGATC
AAGGTGCGCCAGCTCTGCAAGCTGCTGCGCGGCACCAAGGCCCTGACCGAGGTGATTCCCCTCACGGAG
GAAGCCGAGCTCGAGCTGGCTGAGAACCGGGAGATCCTGAAGGAGCCCGTGCACGGCGTGTACTATGAC
CCCTCCAAGGACCTGATCGCCGAAATCCAGAAGCAGGGCCAGGGGCAGTGGACATACCAGATTTACCAG
GAGCCTTTCAAGAACCTCAAGACCGGCAAGTACGCCCGCATGAGGGGCGCCCACACCAACGATGTCAAG
CAGCTGACCGAGGCCGTCCAGAAGATCACGACCGAGTCCATCGTGATCTGGGGGAAGACACCCAAGTTC
AAGCTGCCTATCCAGAAGGAGACCTGGGAGACGTGGTGGACCGAATATTGGCAGGCCACCTGGATTCCC
GAGTGGGAGTTCGTGAATACACCTCCTCTGGTGAAGCTGTGGTACCAGCTCGAGAAGGAGCCCATCGTG
GGCGCGGAGACATTCTACGTGGACGGCGCGGCCAACCGCGAAACAAAGCTCGGGAAGGCCGGGTACGTC
ACCAACCGGGGCCGCCAGAAGGTCGTCACCCTGACCGACACCACCAACCAGAAGACGGAGCTGCAGGCC
ATCTATCTCGCTCTCCAGGACTCCGGCCTGGAGGTGAACATCGTGACGGACAGCCAGTACGCGCTGGGC
ATTATTCAGGCCCAGCCGGACCAGTCCGAGAGCGAACTGGTGAACCAGATTATCGAGCAGCTGATCAAG
AAAGAGAAGGTCTACCTCGCCTGGGTCCCGGCCCATAAGGGCATTGGCGGCAACGAGCAGGTCGACAAG
CTGGTGAGTGCGGGGATTAGAAAGGTGCTGATGGTGGGTTTTCCAGTCACACCTCAGGTACCTTTAAGA
CCAATGACTTACAAGGCAGCTGTAGATCTTAGCCACTTTTTAAAAGAAAAGGGGGGACTGGAAGGGCTA
ATTCACTCCCAAAGAAGACAAGATATCCTTGATCTGTGGATCTACCACACACAAGGCTACTTCCCTGAT
TGGCAGAACTACACACCAGGGCCAGGGGTCAGATATCCACTGACCTTTGGATGGTGCTACAAGCTAGTA
CCAGTTGAGCCAGATAAGGTAGAAGAGGCCAATAAAGGAGAGAACACCAGCTTGTTACACCCTGTGAGC
CTGCATGGGATGGATGACCCGGAGAGAGAAGTGTTAGAGTGGAGGTTTGACAGCCGCCTAGCATTTCAT
CACGTGGCCCGAGAGCTGCATCCGGAGTACTTCAAGAACTGCATGGGTGCCCGAGCTTCGGTACTGTCT
GGTGGAGAGCTGGACAGATGGGAGAAAATTAGGCTGCGCCCGGGAGGCAAAAAGAAATACAAGCTCAAG
CATATCGTGTGGGCCTCGAGGGAGCTTGAACGGTTTGCCGTGAACCCAGGCCTGCTGGAAACATCTGAG
GGATGTCGCCAGATCCTGGGGCAATTGCAGCCATCCCTCCAGACCGGGAGTGAAGAGCTGAGGTCCTTG
TATAACACAGTGGCTACCCTCTACTGCGTACACCAGAGGATCGAGATTAAGGATACCAAGGAGGCCTTG
GACAAAATTGAGGAGGAGCAAAACAAGAGCAAGAAGAAGGCCCAGCAGGCAGCTGCTGACACTGGGCAT
AGCAACCAGGTATCACAGAACTATCCTATTGTCCAAAACATTCAGGGCCAGATGGTTCATCAGGCCATC
AGCCCCCGGACGCTCAATGCCTGGGTGAAGGTTGTCGAAGAGAAGGCCTTTTCTCCTGAGGTTATCCCC
ATGTTCTCCGCTTTGAGTGAGGGGGCCACTCCTCAGGACCTCAATACAATGCTTAATACCGTGGGCGGC
CATCAGGCCGCCATGCAAATGTTGAAGGAGACTATCAACGAGGAGGCAGCCGAGTGGGACAGAGTGCAT
CCCGTCCACGCTGGCCCAATCGCGCCCGGACAGATGCGGGAGCCTCGCGGCTCTGACATTGCCGGCACC
ACCTCTACACTGCAAGAGCAAATCGGATGGATGACCAACAATCCTCCCATCCCAGTTGGAGAAATCTAT
AAACGGTGGATCATCCTGGGCCTGAACAAGATCGTGCGCATGTACTCTCCGACATCCATCCTTGACATT
AGACAGGGACCCAAAGAGCCTTTTAGGGATTACGTCGACCGGTTTTATAAGACCCTGCGAGCAGAGCAG
GCCTCTCAGGAGGTCAAAAACTGGATGACGGAGACACTCCTGGTACAGAACGCTAACCCCGACTGCAAA
ACAATCTTGAAGGCACTAGGCCCGGCTGCCACCCTGGAAGAGATGATGACCGCCTGTCAGGGAGTAGGC
GGACCCGGACACAAAGCCAGAGTGTTG

SEQ ID NO. 10:

MGPISPIETV PVKLKPGMDG PKVKQWPLTE EKIKALVEIC TEMEKEGKIS
KIGPENPYNT PVFAIKKKDS TKWRKLVDFR ELNKRTQDFW EVQLGIPHPA
GLKKKKSVTV LDVGDAYFSV PLDEDFRKYT AFTIPSINNE TPGIRYQYNV
LPQGWKGSPA IFQSSMTKIL EPFRKQNPDI VIYQYMDDLY VGSDLEIGQH
RTKIEELRQH LLRWGLTTPD KKHQKEPPFL KMGYELHPDK WTVQPIVLPE
KDSWTVNDIQ KLVGKLNWAS QIYPGIKVRQ LCKLLRGTKA LTEVIPLTEE
AELELAENRE ILKEPVHGVY YDPSKDLIAE IQKQGQGQWT YQIYQEPFKN
LKTGKYARMR GAHTNDVKQL TEAVQKITTE SIVIWGKTPK FKLPIQKETW
ETWWTEYWQA TWIPEWEFVN TPPLVKLWYQ LEKEPIVGAE TFYVDGAANR
ETKLGKAGYV TNRGRQKVVT LTDTTNQKTE LQAIYLALQD SGLEVNIVTD
SQYALGIIQA QPDQSESELV NQIIEQLIKK EKVYLAWVPA HKGIGGNEQV

DKLVSAGIRK VLMVGFPVTP QVPLRPMTYK AAVDLSHFLK EKGGLEGLIH
SQRRQDILDL WIYHTQGYFP DWQNYTPGPG VRYPLTFGWC YKLVPVEPDK
VEEANKGENT SLLHPVSLHG MDDPEREVLE WRFDSRLAFH HVARELHPEY
FKNCMGARAS VLSGGELDRW EKIRLRPGGK KKYKLKHIVW ASRELERFAV
NPGLLETSEG CRQILGQLQP SLQTGSEELR SLYNTVATLY CVHQRIEIKD
TKEALDKIEE EQNKSKKKAQ QAAADTGHSN QVSQNYPIVQ NIQGQMVHQA
ISPRTLNAWV KVVEEKAFSP EVIPMFSALS EGATPQDLNT MLNTVGGHQA
AMQMLKETIN EEAAEWDRVH PVHAGPIAPG QMREPRGSDI AGTTSTLQEQ
IGWMTNNPPI PVGEIYKRWI ILGLNKIVRM YSPTSILDIR QGPKEPFRDY
VDRFYKTLRA EQASQEVKNW MTETLLVQNA NPDCKTILKA LGPAATLEEM
MTACQGVGGP GHKARVL

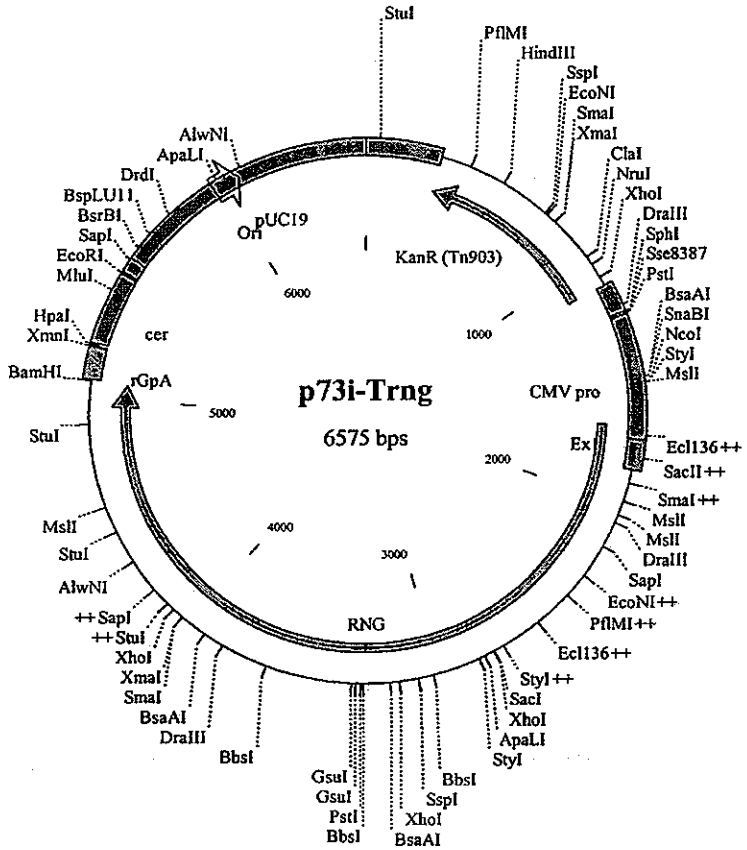


Figure 12

SEQ ID NO. 11:

ATGGGTGCCCGAGCTTCGGTACTGTCTGGTGGAGAGCTGGACAGATGGGAGAAAATTAGGCTGCGCCCG
GGAGGCAAAAAGAAATACAAGCTCAAGCATATCGTGTGGGCCTCGAGGGAGCTTGAACGGTTTGCCGTG
AACCCAGGCCTGCTGGAAACATCTGAGGGATGTCGCCAGATCCTGGGGCAATTGCAGCCATCCCTCCAG
ACCGGGAGTGAAGAGCTGAGGTCCTTGTATAACACAGTGGCTACCCTCTACTGCGTACACCAGAGGATC
GAGATTAAGGATACCAAGGAGGCCTTGGACAAAATTGAGGAGGAGCAAAACAAGAGCAAGAAGAAGGCC
CAGCAGGCAGCTGCTGACACTGGGCATAGCAACCAGGTATCACAGAACTATCCTATTGTCCAAAACATT
CAGGGCCAGATGGTTCATCAGGCCATCAGCCCCCGGACGCTCAATGCCTGGGTGAAGGTTGTCGAAGAG
AAGGCCTTTTCTCCTGAGGTTATCCCCATGTTCTCCGCTTTGAGTGAGGGGGCCACTCCTCAGGACCTC
AATACAATGCTTAATACCGTGGGCGGCCATCAGGCCGCCATGCAAATGTTGAAGGAGACTATCAACGAG
GAGGCAGCCGAGTGGGACAGAGTGCATCCCGTCCACGCTGGCCCAATCGCGCCCGGACAGATGCGGGAG
CCTCGCGGCTCTGACATTGCCGGCACCACCTCTACACTGCAAGAGCAAATCGGATGGATGACCAACAAT
CCTCCCATCCCAGTTGGAGAAATCTATAAACGGTGGATCATCCTGGGCCTGAACAAGATCGTGCGCATG
TACTCTCCGACATCCATCCTTGACATTAGACAGGGACCCAAAGAGCCTTTTAGGGATTACGTCGACCGG
TTTTATAAGACCCTGCGAGCAGAGCAGGCCTCTCAGGAGGTCAAAAACTGGATGACGGAGACACTCCTG
GTACAGAACGCTAACCCCGACTGCAAAACAATCTTGAAGGCACTAGGCCCGGCTGCCACCCTGGAAGAG
ATGATGACCGCCTGTCAGGGAGTAGGCGGACCCGGACACAAAGCCAGAGTGTTGATGGTGGGTTTTCCA
GTCACACCTCAGGTACCTTTAAGACCAATGACTTACAAGGCAGCTGTAGATCTTAGCCACTTTTTAAAA
GAAAAGGGGGGACTGGAAGGGCTAATTCACTCCCAAAGAAGACAAGATATCCTTGATCTGTGGATCTAC
CACACACAAGGCTACTTCCCTGATTGGCAGAACTACACACCAGGGCCAGGGGTCAGATATCCACTGACC
TTTGGATGGTGCTACAAGCTAGTACCAGTTGAGCCAGATAAGGTAGAAGAGGCCAATAAAGGAGAGAAC
ACCAGCTTGTTACACCCTGTGAGCCTGCATGGGATGGATGACCCGGAGAGAGAAGTGTTAGAGTGGAGG
TTTGACAGCCGCCTAGCATTTCATCACGTGGCCCGAGAGCTGCATCCGGAGTACTTCAAGAACTGCATG
GGCCCCATCAGTCCCATCGAGACCGTGCCGGTGAAGCTGAAACCCGGGATGGACGGCCCCAAGGTCAAG
CAGTGGCCACTCACCGAGGAGAAGATCAAGGCCCTGGTGGAGATCTGCACCGAGATGGAGAAAGAGGGC
AAGATCAGCAAGATCGGGCCTGAGAACCCATACAACACCCCCGTGTTTGCCATCAAGAAGAAGGACAGC
ACCAAGTGGCGCAAGCTGGTGGATTTCCGGGAGCTGAATAAGCGGACCCAGGATTTCTGGGAGGTCCAG
CTGGGCATCCCCCATCCGGCCGGCCTGAAGAAGAAGAAGAGCGTGACCGTGCTGGACGTGGGCGACGCT
TACTTCAGCGTCCCTCTGGACGAGGACTTTAGAAAGTACACCGCCTTTACCATCCCATCTATCAACAAC
GAGACCCCTGGCATCAGATATCAGTACAACGTCCTCCCCCAGGGCTGGAAGGGCTCTCCCGCCATTTTC
CAGAGCTCCATGACCAAGATCCTGGAGCCGTTTCGGAAGCAGAACCCCGATATCGTCATCTACCAGTAC
ATGGACGACCTGTACGTGGGCTCTGACCTGGAAATCGGGCAGCATCGCACGAAGATTGAGGAGCTGAGG
CAGCATCTGCTGAGATGGGGCCTGACCACTCCGGACAAGAAGCATCAGAAGGAGCCGCCATTCCTgaaG
ATGGGCTACGAGCTCCATCCCGACAAGTGGACCGTGCAGCCTATCGTCCTCCCCGAGAAGGACAGCTGG
ACCGTGAACGACATCCAGAAGCTGGTGGGCAAGCTCAACTGGGCTAGCCAGATCTATCCCGGGATCAAG
GTGCGCCAGCTCTGCAAGCTGCTGCGCGGCACCAAGGCCCTGACCGAGGTGATTCCCCTCACGGAGGAA
GCCGAGCTCGAGCTGGCTGAGAACCGGGAGATCCTGAAGGAGCCCGTGCACGGCGTGTACTATGACCCC
TCCAAGGACCTGATCGCCGAAATCCAGAAGCAGGGCCAGGGGCAGTGGACATACCAGATTTACCAGGAG
CCTTTCAAGAACCTCAAGACCGGCAAGTACGCCCGCATGAGGGGCGCCCACACCAACGATGTCAAGCAG
CTGACCGAGGCCGTCCAGAAGATCACGACCGAGTCCATCGTGATCTGGGGGAAGACACCCAAGTTCAAG
CTGCCTATCCAGAAGGAGACCTGGGAGACGTGGTGGACCGAATATTGGCAGGCCACCTGGATTCCCGAG
TGGGAGTTCGTGAATACACCTCCTCTGGTGAAGCTGTGGTACCAGCTCGAGAAGGAGCCCATCGTGGGC
GCGGAGACATTCTACGTGGACGGCGCGGCCAACCGCGAAACAAAGCTCGGGAAGGCCGGGTACGTCACC
AACCGGGGCCGCCAGAAGGTCGTCACCCTGACCGACACCACCAACCAGAAGACGGAGCTGCAGGCCATC
TATCTCGCTCTCCAGGACTCCGGCCTGGAGGTGAACATCGTGACGGACAGCCAGTACGCGCTGGGCATT
ATTCAGGCCCAGCCGGACCAGTCCGAGAGCGAACTGGTGAACCAGATTATCGAGCAGCTGATCAAGAAA
GAGAAGGTCTACCTCGCCTGGGTCCCGGCCCATAAGGGCATTGGCGGCAACGAGCAGGTCGACAAGCTG
GTGAGTGCGGGGATTAGAAAGGTGCTGTAA

SEQ ID NO:12:

MGARASVLSG GELDRWEKIR LRPGGKKKYK LKHIVWASRE LERFAVNPGL
LETSEGCRQI LGQLQPSLQT GSEELRSLYN TVATLYCVHQ RIEIKDTKEA
LDKIEEEQNK SKKKAQQAAA DTGHSNQVSQ NYPIVQNIQG QMVHQAISPR
TLNAWVKVVE EKAFSPEVIP MFSALSEGAT PQDLNTMLNT VGGHQAAMQM
LKETINEEAA EWDRVHPVHA GPIAPGQMRE PRGSDIAGTT STLQEQIGWM
TNNPPIPVGE IYKRWIILGL NKIVRMYSPT SILDIRQGPK EPFRDYVDRF
YKTLRAEQAS QEVKNWMTET LLVQNANPDC KTILKALGPA ATLEEMMTAC
QGVGGPGHKA RVLMVGFPVT PQVPLRPMTY KAAVDLSHFL KEKGGLEGLI
HSQRRQDILD LWIYHTQGYF PDWQNYTPGP GVRYPLTFGW CYKLVPVEPD
KVEEANKGEN TSLLHPVSLH GMDDPEREVL EWRFDSRLAF HHVARELHPE

YFKNCMGPIS PIETVPVKLK PGMDGPKVKQ WPLTEEKIKA LVEICTEMEK
EGKISKIGPE NPYNTPVFAI KKKDSTKWRK LVDFRELNKR TQDFWEVQLG
IPHPAGLKKK KSVTVLDVGD AYFSVPLDED FRKYTAFTIP SINNETPGIR
YQYNVLPQGW KGSPAIFQSS MTKILEPFRK QNPDIVIYQY MDDLYVGSDL
EIGQHRTKIE ELRQHLLRWG LTTPDKKHQK EPPFLKMGYE LHPDKWTVQP
IVLPEKDSWT VNDIQKLVGK LNWASQIYPG IKVRQLCKLL RGTKALTEVI
PLTEEAELEL AENREILKEP VHGVYYDPSK DLIAEIQKQG QGQWTYQIYQ
EPFKNLKTGK YARMRGAHTN DVKQLTEAVQ KITTESIVIW GKTPKFKLPI
QKETWETWWT EYWQATWIPE WEFVNTPPLV KLWYQLEKEP IVGAETFYVD
GAANRETKLG KAGYVTNRGR QKVVTLTDTT NQKTELQAIY LALQDSGLEV
NIVTDSQYAL GIIQAQPDQS ESELVNQIIE QLIKKEKVYL AWVPAHKGIG
GNEQVDKLVS AGIRKVL*

