Fig. 1

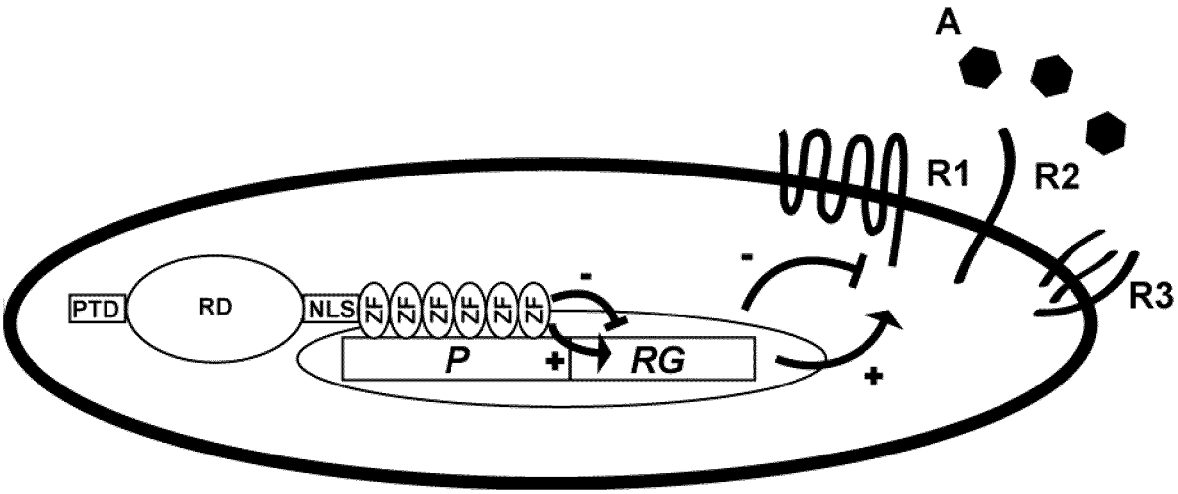


Fig. 2

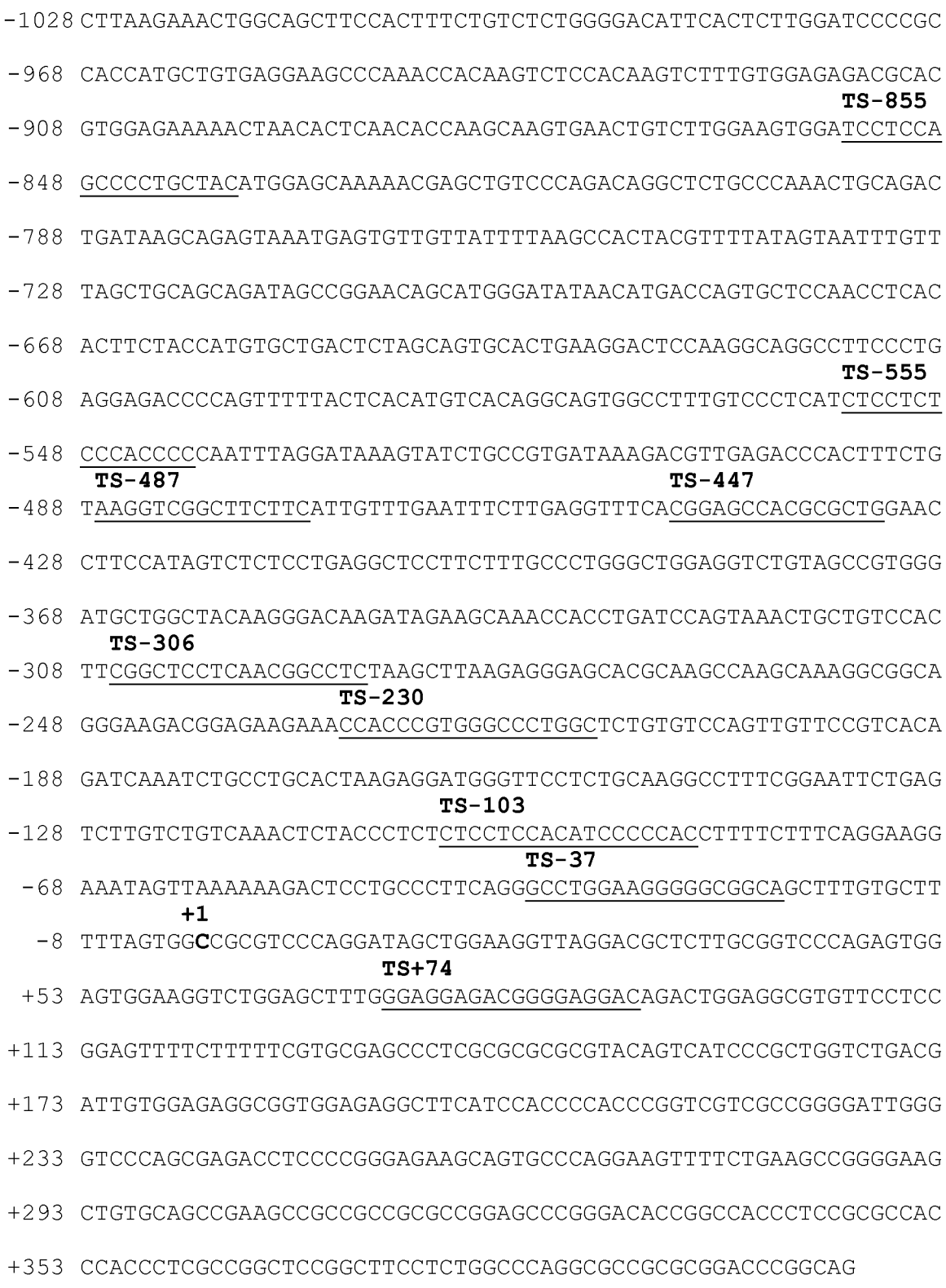

-1028 CTTAAGAAACTGGCAGCTTCCACTTTCTGTCTCTGGGGACATTCACTCTTGGATCCCCGC
-968 CACCATGCTGTGAGGAAGCCCAAACCACAAGTCTCCACAAGTCTTTGTGGAGAGACGCAC
TS-855
-908 GTGGAGAAAAACTAACACTCAACACCAAGCAAGTGAACTGTCTTGGAAGTGGATCCTCCA
-848 GCCCCTGCTACATGGAGCAAAAACGAGCTGTCCCAGACAGGCTCTGCCCAAACTGCAGAC
-788 TGATAAGCAGAGTAAATGAGTGTTGTTATTTTAAGCCACTACGTTTTATAGTAATTTGTT
-728 TAGCTGCAGCAGATAGCCGGAACAGCATGGGATATAACATGACCAGTGCTCCAACCTCAC
-668 ACTTCTACCATGTGCTGACTCTAGCAGTGCACTGAAGGACTCCAAGGCAGGCCTTCCCTG
TS-555
-608 AGGAGACCCCAGTTTTTACTCACATGTCACAGGCAGTGGCCTTTGTCCCTCATCTCCTCT
-548 CCCACCCCCAATTTAGGATAAAGTATCTGCCGTGATAAAGACGTTGAGACCCACTTTCTG
TS-487
TS-447
-488 TAAGGTCGGCTTCTTCATTGTTTGAATTTCTTGAGGTTTCACGGAGCCACGCGCTGGAAC
-428 CTTCCATAGTCTCTCCTGAGGCTCCTTCTTTGCCCTGGGCTGGAGGTCTGTAGCCGTGGG
-368 ATGCTGGCTACAAGGGACAAGATAGAAGCAAACCACCTGATCCAGTAAACTGCTGTCCAC
TS-306
-308 TTCGGCTCCTCAACGGCCTCTAAGCTTAAGAGGGAGCACGCAAGCCAAGCAAAGGCGGCA
TS-230
-248 GGGAAGACGGAGAAGAAACCACCCGTGGGCCCTGGCTCTGTGTCCAGTTGTTCCGTCACA
-188 GATCAAATCTGCCTGCACTAAGAGGATGGGTTCCTCTGCAAGGCCTTTCGGAATTCTGAG
TS-103
-128 TCTTGTCTGTCAAACTCTACCCTCTCTCCTCCACATCCCCCACCTTTTCTTTCAGGAAGG
TS-37
-68 AAATAGTTAAAAAAGACTCCTGCCCTTCAGGGCCTGGAAGGGGGCGGCAGCTTTGTGCTT
+1
-8 TTTAGTGGCCGCGTCCCAGGATAGCTGGAAGGTTAGGACGCTCTTGCGGTCCCAGAGTGG
TS+74
+53 AGTGGAAGGTCTGGAGCTTTGGGAGGAGACGGGGAGGACAGACTGGAGGCGTGTTCCTCC
+113 GGAGTTTTCTTTTTCGTGCGAGCCCTCGCGCGCGCGTACAGTCATCCCGCTGGTCTGACG
+173 ATTGTGGAGAGGCGGTGGAGAGGCTTCATCCACCCCACCCGGTCGTCGCCGGGGATTGGG
+233 GTCCCAGCGAGACCTCCCCGGGAGAAGCAGTGCCCAGGAAGTTTTCTGAAGCCGGGGAAG
+293 CTGTGCAGCCGAAGCCGCCGCCGCGCCGGAGCCCGGGACACCGGCCACCCTCCGCGCCAC
+353 CCACCCTCGCCGGCTCCGGCTTCCTCTGGCCCAGGCGCCGCGCGGACCCGGCAG

Fig. 3

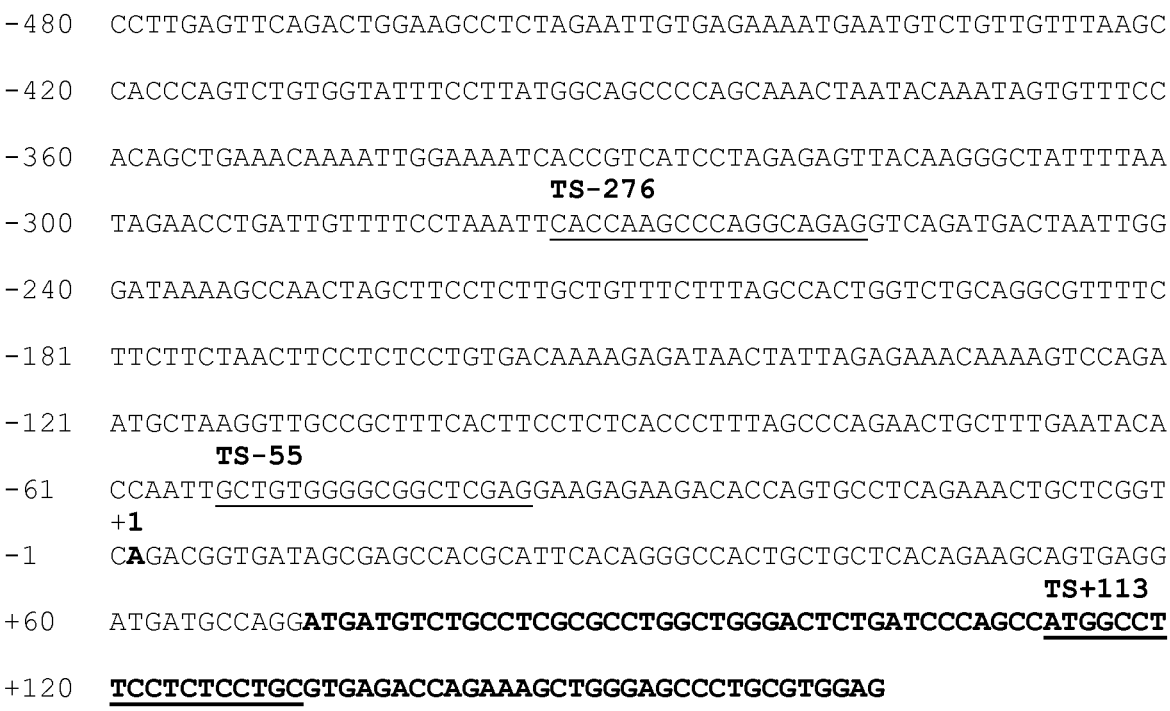

-480 CCTTGAGTTCAGACTGGAAGCCTCTAGAATTGTGAGAAAATGAATGTCTGTTGTTTAAGC
-420 CACCCAGTCTGTGGTATTTCCTTATGGCAGCCCCAGCAAACTAATACAAATAGTGTTTCC
-360 ACAGCTGAAACAAAATTGGAAAATCACCGTCATCCTAGAGAGTTACAAGGGCTATTTTAA
TS-276
-300 TAGAACCTGATTGTTTTCCTAAATTCACCAAGCCCAGGCAGAGGTCAGATGACTAATTGG
-240 GATAAAAGCCAACTAGCTTCCTCTTGCTGTTTCTTTAGCCACTGGTCTGCAGGCGTTTTC
-181 TTCTTCTAACTTCCTCTCCTGTGACAAAAGAGATAACTATTAGAGAAACAAAAGTCCAGA
-121 ATGCTAAGGTTGCCGCTTTCACTTCCTCTCACCCTTTAGCCCAGAACTGCTTTGAATACA
TS-55
-61 CCAATTGCTGTGGGGCGGCTCGAGGAAGAGAAGACACCAGTGCCTCAGAAACTGCTCGGT
+1
-1 CAGACGGTGATAGCGAGCCACGCATTCACAGGGCCACTGCTGCTCACAGAAGCAGTGAGG
TS+113
+60 ATGATGCCAGGATGATGTCTGCCTCGCGCCTGGCTGGGACTCTGATCCCAGCCATGGCCT
+120 TCCTCTCCTGCGTGAGACCAGAAAGCTGGGAGCCCTGCGTGGAG

Fig. 4


TS-147
-168 TAAGTGGGTAAATATTAAATTGCCCAGTTGGGCACCATCCTGAATATTATCTCTAAAGAA
-108 AGAAGCAAAACCAGGCACAGCTGATGGGTTAACCAGATATGATACAGAAAACATTTCCTT
+1
-48 CTGCTTTTTGGTTTTAAGCCTATATTTGAAGCCTTAGATCTCTCCAGCACAGTAAGCACC
TS+17
+13 AGGAGTCCATGAAGAAGATGGCTCCTGCCATGGAATCCCC

Fig. 5


TS-1149
-1177 TGTCCCCGGACGAGGACTGCCCCCCTCCCTCGGGCAACTACTACTGATGCTGTCCAGGCA
-1117 TCGCCCAAGGGGAAAGGTTGCAGCGGGGTCGGAAGGCGCGGGAGGAGTCTGGCGGTGATT
-1057 GATGGGAAGGGATGAATGAATAAAAGTACTTGTCTGATGGCAGCAGAGACCCCGAGCAAA
-997 CGGTGGAGGCTACACTGTCTGGCATTCTCGCAGCGTTTCGTCAGAGCCGGACCCGCCTGC
-937 AGCTCAAGGGAGGCGTGCTCCTCTCCCAGAGCAGGCTGGAACCCAGCTGGGTTCCGCCTC
-877 CCGGGAAGGTGGTCTCCATTCGTCGCTCTGCATCTGGTTTGTCAGATCCGAGAGGTAAAC
-817 ATTCGGGCTTGGTGTTGAATTAAAATCATTGATTGAACCTTATTCTGGGGCTTCGGTTTG
-757 GCTTACTAGTTTGGGATTTTAAAAAAATAAAAATTAAGCCTATAGAGAGGGCAAATTAAA
-697 ATTAGGTTGGGTAAAGGAAGGAGCGCGAGTGTTTGAAGCCGTTTGGAGGGAACAGCGGTT
-637 TCCAAGTTCCTGCTGACTTGAGAAGTCTCTGCGGGTTTCCGAATCTCCGGCGCACTCCTG
-577 GGCGCGCTGCGGGAGCTGTAGCTCAGCCAGCCAGGGAGTAGCGGCTTTCATCCGCCGGGA
TS-487
-517 GGAGTCTTTCGAGTTCAATCGCGGGGTATAGAGGTTCCCCTGCGGGGCAAAATGCAGAGC
-457 TTGACACAAGCCCTTGGCCTCTAGGTGCCTTAATTCCGCGGTTCCCACGCACGCTTAACT
-397 AAGACGTGTCTGTATTCCTCCCGTTACGTGAAAGAGTTCGGAGCTTTGCCTGGGACCCCC
-337 ATCATTCCCTCCCTGGCACACCCCTTCCAGAACGCCCCGCCCCACTGCATATTATTTACC
-277 CCTCCTGGCCACGCGGGGGAAGAAAAACAGCTGAGAGGGCATCAGGAAGGAGTTTCGACC
-217 CGCGCTGGCGAGTCATGAGCGCCAAGTTTCCCACTGGCGCGCAAACTTGAGTTACTTTTG
-157 AGCGTGGATACTGGCGAAGAGGCTGCGGGCGGTATTAGCGTTTGCAGCGACTTGGCTCGG
-97 GCAGCTGACCCAAGTGTCCTGTCTTCCTTCCTCTGCTTGTCTCTAGGCTCTGAAACTGCG
+1
-37 GAGCGGCCACCGGACGCCTTCTGGAGCAGGTAGCAGCATG

Fig. 6

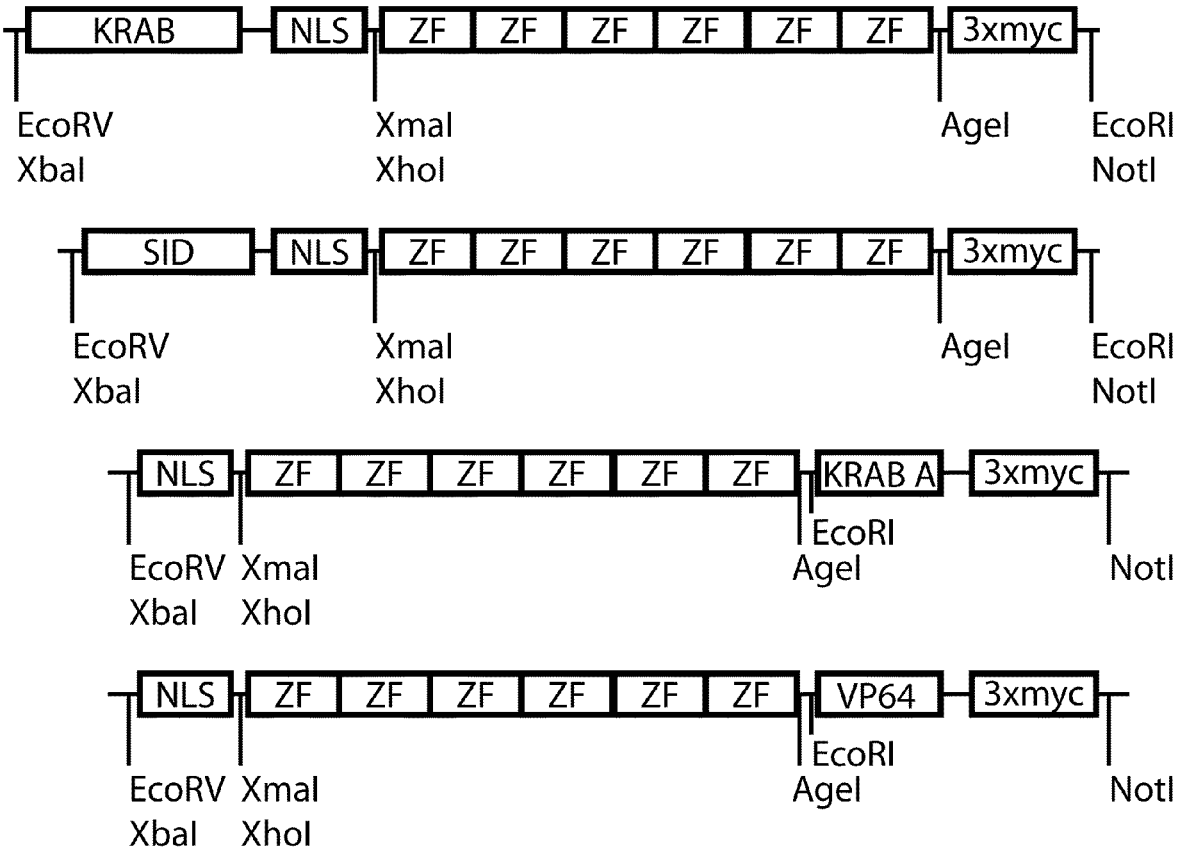

KRAB
NLS
ZF
ZF
ZF
ZF
ZF
ZF
3xmyc
EcoRV
XbaI
XmaI
XhoI
AgeI
EcoRI
NotI
SID
NLS
ZF
ZF
ZF
ZF
ZF
ZF
3xmyc
EcoRV
XbaI
XmaI
XhoI
AgeI
EcoRI
NotI
NLS
ZF
ZF
ZF
ZF
ZF
ZF
KRAB A
3xmyc
EcoRV
XbaI
XmaI
XhoI
EcoRI
AgeI
NotI
NLS
ZF
ZF
ZF
ZF
ZF
ZF
VP64
3xmyc
EcoRV
XbaI
XmaI
XhoI
EcoRI
AgeI
NotI

Fig. 7

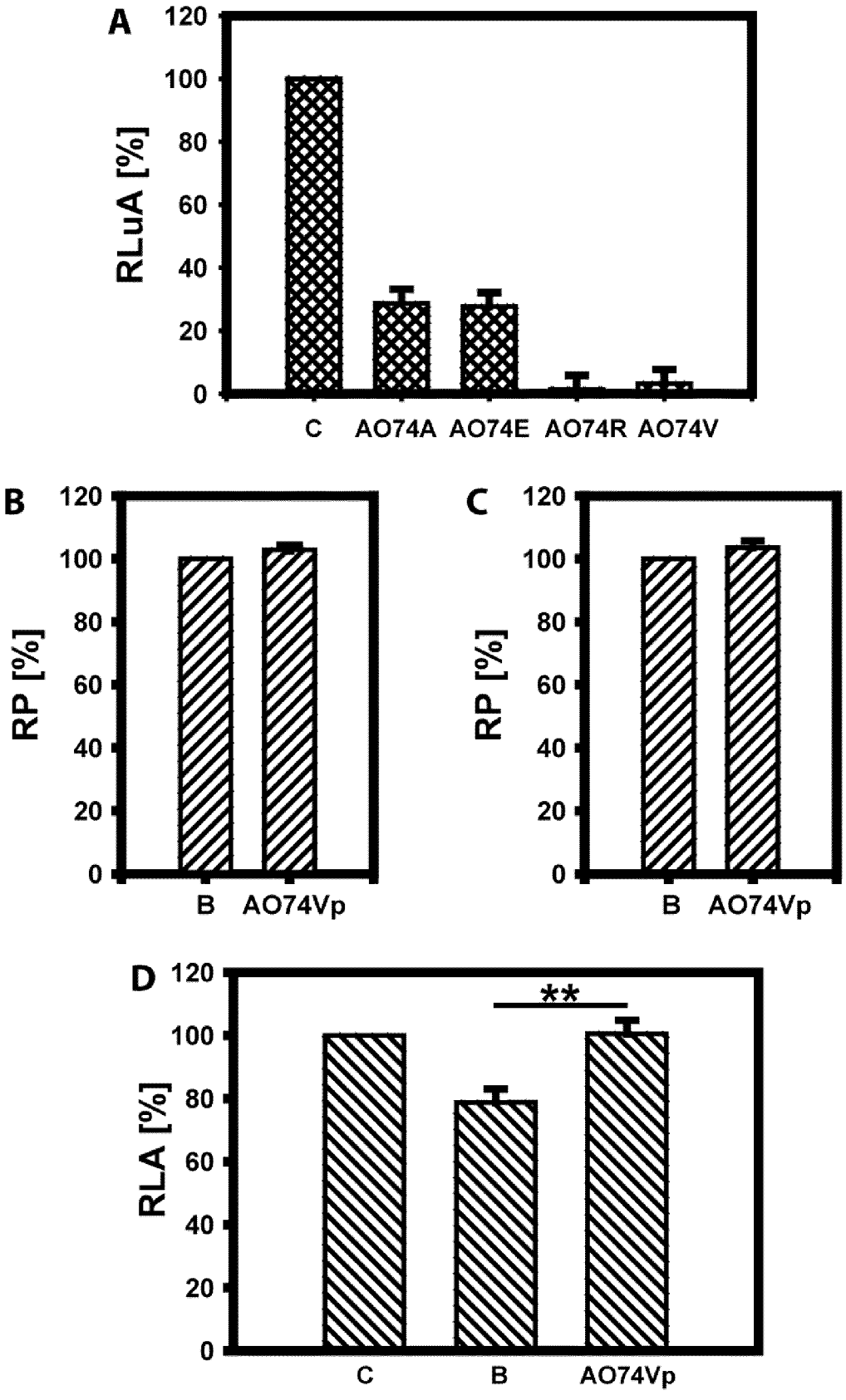

A
RLuA [%]
120
100
80
60
40
20
0
C
AO74A
AO74E
AO74R
AO74V
B
RP [%]
B
AO74Vp
C
RP [%]
B
AO74Vp
D
RLA [%]
**
C
B
AO74Vp

Fig. 8

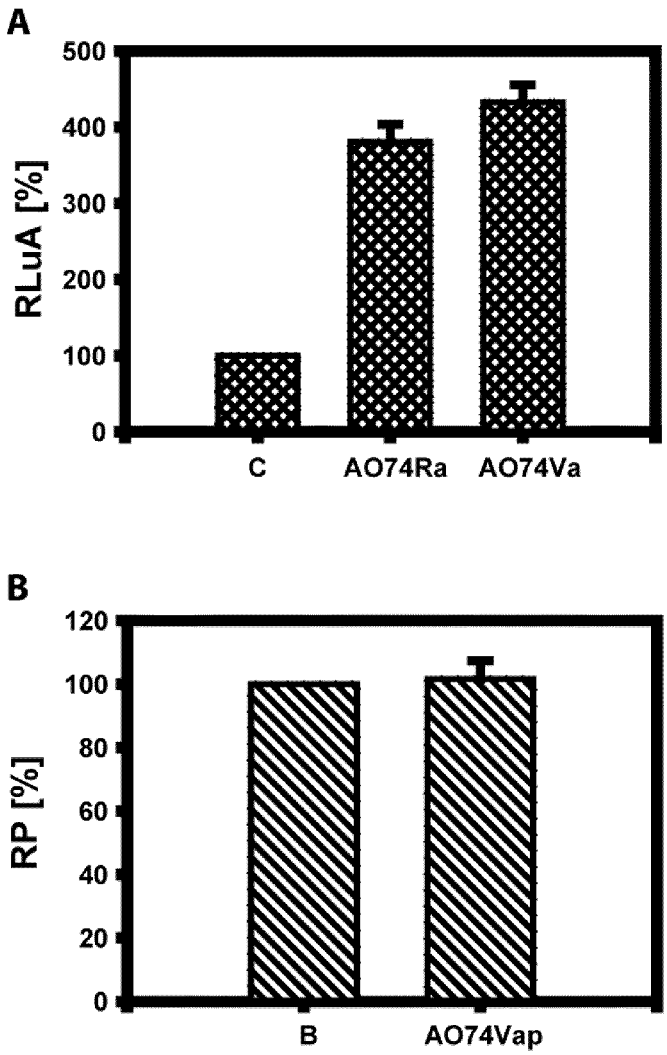

A
500
400
300
200
100
0
RLuA [%]
C
AO74Ra
AO74Va
B
120
100
80
60
40
20
0
RP [%]
B
AO74Vap

Fig. 9

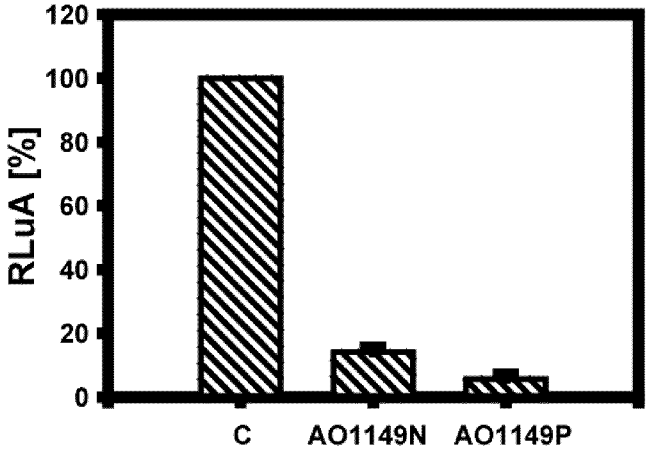


Fig. 10

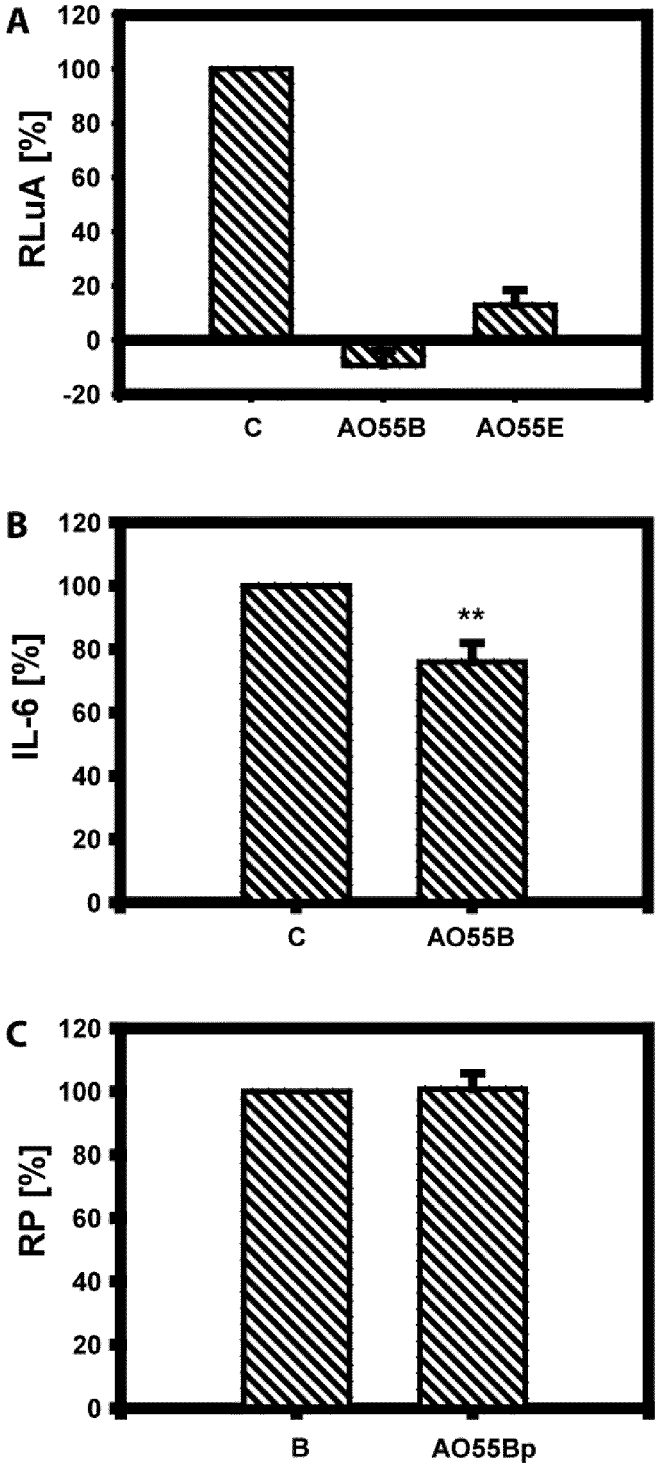
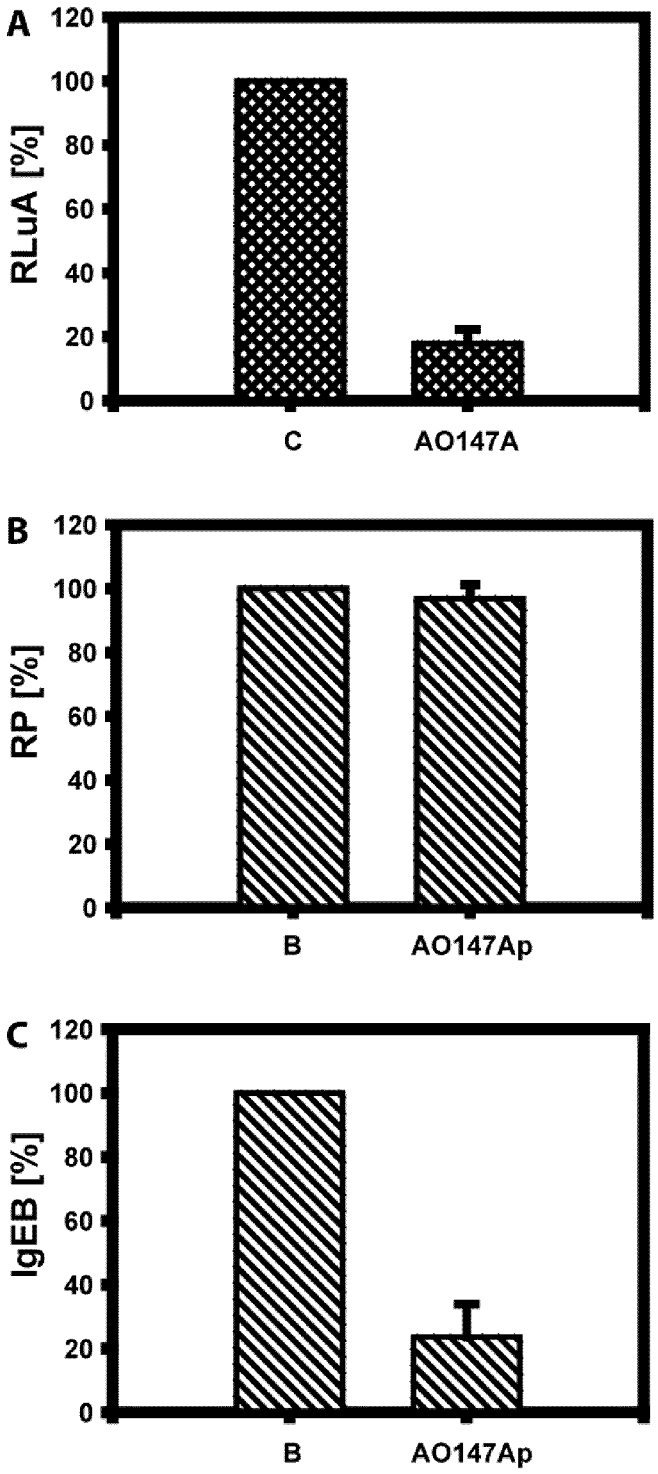

A
RLuA [%]
120
100
80
60
40
20
0
-20
C
AO55B
AO55E
B
IL-6 [%]
120
100
80
60
40
20
0
**
C
AO55B
C
RP [%]
120
100
80
60
40
20
0
B
AO55Bp

Fig. 11


A
RLuA [%]
120
100
80
60
40
20
0
C
AO147A
B
RP [%]
120
100
80
60
40
20
0
B
AO147Ap
C
IgEB [%]
120
100
80
60
40
20
0
B
AO147Ap