

Fig. 24. Classic attenuation regulation of genes *ilvB* and *ilvI* in actinobacteria. Designations as in Figure 4. The gene is annotated as *ilvI* in *Frankia alni* (FRAAL). In *Rhodococcus jostii* (RHA1) only two (*ilvB4* и *ilvB5*) out of six paralogs have the shown regulations.

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DIP      *****AUGAACAUUAUCGA***CUUGUAGUAGUAUACCACUCGGCGCUGCCGUAAGCGGCUACAAGUCGUUUCCGA*****AAAGCGCCUCUGACAGCA***CCACACAUGCUGAGCGGGGCUUUCCUUAU
CE       *****AUGACCUAUUCGACCUUGUAGUAUUCGUAACUCGCGCGCGUUGCCGUAACGGUUUUUCAAGUCGUCUCGU*****CAAGCGCCUCUGACAGUACCCACCACAGUGUCUUCGAGGGCUUUUGUUGUU
cgR      *****AUGACCAUUAUCGA***CUUGUAGUAGUAACCGCGCGCGCGCGUAGCGGCCUCCAGUCGUCUCGUC*****AAGCGCCUCUGACAACACUCCACCACAGUGUUGAAAGCGAGGGCUUUUCUUGUU
jk       *****AUGGAUUUACGCAACUAGUACGUAUCUCAUUAUCGAGGGGCGCCACUAGCUUACUCUUGAGCUCGACAG*****GCAGCCUCCAGCAACCAGCGCAACAAGCUGCGUUAUUUGGGGCUUUUUGUUG
SAV      *****AUGCGCACCCGAAUUCUCGUACUUGGAAAGCGCGUCGGCUGAGCUGGUGAAGUACCGGACGACCCGGAACACCCAGCGACCGCAC***CGGGCGCGUCUCCUUCGCUUGCC*****UCAGGGCAGAGGGGCUUUUUGUU
SCO      *****AUGCGCACCCGAAUUCUCGUACUUGGAAAGCGCGUCGGCUGAAAGCUGGUGACGUCGCGGACCCGGAACUCCCGCGACCCACA***CCGACGCGUCUCCUUCGCUUGCC*****UACGGCAGAGGGGCUUUUUGUU
SCA      *****AUGCGCACCCGAAUUCUCGUACUUGGAAAGCGCGUCGGCUGAAAGCUGGUGACGUCGCGGACCCGGAACUCCCGCGACCCGGAACUCCCGCGACCCACA***CCGACGCGUCUCCUUCGCUUGCC*****UAGGGCAGAGGGGCUUUUUGUU
Mma      *****AUGGAUACCGCGGAAACCCCGGAAAGCUUGUAGUACUUGGUCGCGCGUUGUUGCCUGACUAGGUCAAUCGA*****GCACCAACGCGCAACCCUCGUGCAGCAGC*****UGAGCUGACG*GGGUUUUUGUU
micro    *****AUGCUCGUAGUAUUGGUCGCGCGUUGUUGCCUGACUAGCCCAAGCGA*****GCACCAACGCGACCCUCGUGCAGCAGC*****UGAGCUGGCGA*GGGUUUUUCUU
Mflv     *****AUGCAGACCUGCUCGUAGUAUUGGUCGCGCGUUGUUGCCUGAGCCCGUGGCGCCUGAUUCCGGCAUAGCA*****CAACCAGCAUACCGCGCAACCCUCGUAACAGCCGC*****CGGGCUGACG*GGGUUUUUGUU
MAV      *****AUGGAUACCGCGGAAAGCCCGGGAUGCUCGUAGUAUUG**AGCGCGUUGGUGCCUGAGUUGCCCGUAGCA*****UGUGAAGCAAUCCAGCACACCGCGCAACCCUCGUGCAGCACA*****AGCUGUCC*GGGUUUUUGUU
BCG      *****AUGGACAAGGCCGGAAGCCCGGGAUGCUCGUAGUAUUGGUCGCGCGUUGUUGCCUGACUAGCCCAAGCGA*****UGUGAAGCAAUCCAGCACACCGCGCAACCCUCGUGCAGCAGC*****UGAGCUGGCGA*GGGUUUUUCUU
ML       *****AUGGAUACCGCGCCAGCCCGGAUGUUGGUAGUAUUGGUCAGCGCGUUGUUGGUUGAGUAGCACUUCAGUA*****UUUGAAGCGAUCCAAAGCCACCGCGCAACCCUCGUGCAGCUAG*****UCAGCUGUCCA*GGGUUUUUGUU
MtubH    *****AUGGACAAGGCCGGAAGCCCGGGAUGCUCGUAGUAUUGGUCGCGCGUUGUUGCCUGACUAGCCCAAGCGA*****GCACCAACGCGACCCUCGUGCAGCAGC*****UGAGCUGGCGA*GGGUUUUUCUU
MUL      *****AUGGAUACCGCCAGAACCCCGGAAAGCUUGUAGUACUUGGUCGCGCGUUGUUGCCUGACUAGCCCAAGCGA*****GCACCAACGCGACCCUCGUGCAGCAGC*****UGAGCUGGCGA*GGGUUUUUCUU
Mvan     *****AUGCAGACCUGCUCGUAGUAUUGGUCGCGCGUUGUUGCCUGAGUAGCCCAAGCGA*****GCACCAACGCGCAACCCUCGUGCAGCAGC*****UGAGCUGACG*GGGUUUUUGUU
Mgil     *****AUGCAGACCUGCUCGUAGUAUUGGUCGCGCGUUGUUGCCUGAGUAGCCCAAGCGA*****GCACCAACGCGCAACCCUCGUGCAGCAGC*****UGAGCUGGCGA*GGGUUUUUCUU
MSMEG    *****AUGCAGACCOCGGGAGUGCUCGUAGUAUUGGUCGCGCGUUGUUGCCUGAGUAGCCCAAGCGA*****GCACCAACGCGCAACCCUCGUGCAGCAGC*****UGAGCUGGCGA*GGGUUUUUCUU
Mkms     AUGCUCGACGGAGGCGCUUCGCGCGGACAUUCGUCGUAGUAUUGGUCGCGCGUUGUUGCCUGAGUAGCCCAAGCGA*****GCACCAACGCGCAACCCUCGUGCAGCAGC*****UGAGCUGGCGA*GGGUUUUUCUU
Noca     *****AUGCGCAACGCGCAUUCUUGUACGACGCGCGUGAGCUGAGUAGCCCAAGCGA*****GCACCAACGCGCAACCCUCGUGCAGCAGC*****UGAGCUGGCGA*GGGUUUUUCUU
nfa      *****GUGAAUCGAAACGAGUUGCUCGUAAUCGGCCGCGCGUCAGCGUUGAGCCUGACUGACUGCCUAGG*****UCGAAUACGUCAGCUCGCGUUGGACGCGCCAACCCUCGUAACAGGCAC*****GCUCUGCAGGGGCUUUUUGUU
Req      *****GUGAAGCAGAAUGAGUUGCUCGUAAUCGGCCGCGCGUGCUGCCUGAGCCCGUUGUUGCAACU*****CGCCAGUAACGACGCGCCACCCUCGUAACAGCU*****GAUCUGACGA*GGGUUUUUGUU
Strop    *****AUGCUUGUCGCCAUGCUCGUCUACCGGUCGCGCGAUAUCUACCGAGCGCACUCUCCACU*****GAGAGUGCGCUGGCCCGUGCA*****UCCCGCAGCGGGGCUUUUUGUU
FRAAL    *****AUGUCUGGCACAGUCAGAUUCUCGUACGUUCAGAGCGCGCUGAGCUGACAU*****UCGACCCCGUGCGCCGCCUCAGUGCC*****CUAGGCACAGGGGCUUUUUCUU
Franean1 *****AUGCUCGUCGGCAUUCUCGUACGUACGUUCUCGUAGGUCGCGAGCGCGUGUAGCUGGACACG*****AUCGGUCUCGACCCAGCCGCGCGGCCUCUAGUGCC*****CAUUGGCACAGGGGCUUUUUCUU
Franci3  *****GUGCAUCUCGGGAUUCUCGUACGUCUACAGAGCGUGCAUAGUCGACGACG*****UCGACCCUGUGCGCGGCCCCUCAGUGCC*****UCGGCAGAGGGGCUUUUUCUU
Acel     *****GUGCGUUUUUUCGCGCUCGUACUCUGGCGCGCGUGGUGAGCCGACGGUCAC*****CUGGCGCGCAACCCUCUGUGCC*****GCAACAGGGGCUUUUUGUU
Krad     *****AUGCGGUUCCUCGUAGCCAUUCGGACAGCGCGCGCGUGAGCCAGUUCGGCCG*****AGCGCGCGACCCUCUACACGCAUC*****CCUUGGCUGAGGGGCUUUUUGUU
Aaur     *****AUGAUCACAUUCGUUACCGUCGGCGUCGUCGUCCUUAACCAAGCGCGUGGCUUAGCCC*****GACUGGUUAACGACCCGUCACGCGCAACCCUCUGAAGAGCCGG*****AAGGCUGAGGGGCUUUUUAU
Arth     AUGAUCGCAUUCGUUACCAACUGCGCGGUCGAGAUAGCAGUCGUCGUCUCUUAACCAAGCGCGUGGUCUCAAUAGCC*****CGACUGGUUAACGACCCGUCAGCGCAACCCUCUGAAGAGCCGG*****CAGGCUGAGGGGCUUUUCUAU
Tfu      *****GUGCAGAGCAACUUUCUGAUUCUCGUACUUGGUCAGCGCGCAGCCCGUGACCGAGUCGAC*****GCUUGCGCGUCCUUCACCCGUAAC*****CGGGUGGGGCUUUUUGUU
RTFU     *****GUGCAGAGCAACUUUCUGAUUCUCGUACUUGGUCAGCGCGCAGCCCGUGACCGAGUCGAC*****GCUUGCGCGUCCUUCACCCGUAAC*****CGGGUGGGGCUUUUUGUU
TW       *****GUGGCGAGGAAUUGUUUUAUAACAACAGCUAUUCUCA*GACCGACCUAGAAUA*****CCGGUGAUGCGUAUAUCUGUUUUAACUUGCCGAAUCGUUAUCAGCGCAAGUUCAGGGU
JNB      *****GUGACCCGCUUCUCGUACUUCUCUGGCGCCGCGCCUCCUGACAGGUCC*****GGCCAGGCGCUCUCCUUAUCGUCGCC**CAGUACGU*GGGACGGGAGGCUUUUUGUU
SACE     *****AUGCAGCGCAGUACGACCUUCUCGUAAUUCUGGCGCGUCGACCGCCUGAGAGUUCGUA*****CCGUCGACGCGCCACCCUCGUAAGACCA***GCGUCUGGUCUGCGGGGCUUUUUCUU
Blin     *****AUGACUCACCUUCUCGUCGUCGUAAUUAACAGCGCGCGGCUUCUCCGUGAGCUGUACACAGCA*****UGUUCGCGCGGCCCUACCGA*****AACCGGAGGGGCUUUUUCUA
BAD      *****AUGCCGAGCUGCGGUCCUUCGCGCGCGUGUAACCGGAGGCGUGCCGUCUCCACACCAAGUGAGUGGUUGCCGGAUAACCGUAUAA*****AGCAUCGAAACCCUGCGAUCGAC*****GGUGCAGGGGCUUUUA
RHA1_5   *****GUGAAACAGAAUGAGUUGCUCGUAAUCGGCCGCGCGUGCUGCCUGAGUUCGAUUCUUAACU*****CGCCAGUAACGACGCGCCACCCUCGUAACAGCA*****UCAUCUGACG*GGGUUUUUGUU
RHA1_4   *****AUGAAGCUCGUAUUCUCCGGAACCGUGAGUAGC*****CCCGCGGGUGCGGGCGGAGAGCGCUUCGCGCCCGCACCCGUCGGGUACCCGCGCAACUCCGACACGAACAGCACAGCC

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