

Рис. 12. Классическая аттенуаторная регуляция: а) оперонов *trpE*, *trpS*, *trpBE*, *trpBA* у актинобактерий, б) гена *trpB* у Bacillales (Firmicutes). Обозначения такие же, как на рисунке 4.

а)

DIP_trpBE *****AUGAAUGCACAUAACUGGUGGUGGCGCGCUUAAACC*GCGGGCC*GUUUU***CACGCAUUCAUUUC*****AAC**AGGCUCGCGCUUGUCCA*****ACAAGCAGCGGGCCUUUUUGUUAGC*

DIP_trpBA *****AUGAUGAAUGCAGCUUUAAGUUCUUCUGGUGGCGCGCCUAGCAGGCGGGCCCUUUUGUGAGCAUUCACCACACAACUUUUGGAAACACAAGCCCGCGUAU*****CGCGGGCCUUUUUCGUUAU*

CE_trpE *****GUGAACAACUUCUGUCAAUCCAGGGCACCAGUGGUGGUGGCGCGCUAGAUAAGCGGGCCACCGAUCACCAAGUUGUUUUCACACUGAAGAUUU***CAAGGCUCGUUAUUCUUCGACGAAGCAGCGGGCCUUUU*GUGGUU*

cg_trpE *****GUGAAUAACUCUUGUCUCAGUCAAAAGCACCAGUGGUGGUGGCGCGCUAAACUAAGCGAGCCUGACACCUCAAGUUGUUUUCACUU*UGAUGAAUUUUUUAAGGCUCGU**ACUUCGUUCGACGAAGAACCGGGCCUUUU*GUGGUU*

SAV_trpS *****AUGACUACGCGUACGUGUACCCAGCAGUGGUGGCGCGCCUGA*CGGCG*GCCGUACACACGUAUGUACUC*****AACGCGCGCGCCCU*****CGGCGGGCCGUUCUGUUUCU*

SAV_trpE *****AUGUUCGCGCACUCGAUCCAGAACUGGUGGUGGACCGCUCAUCCGGCG*GCCCACUGACUUGCGCGU*****ACGCAAGACUUCGCGAAGGCCGCCC*****GAGGGGCGGCCUUUCGUGUUUCC

SCO_trpE *****AUGUUCGCGCACUCGACCCGGAACUGGUGGUGGACCGCUCACCCGGCG*GCCCACUGACUUGCGCGCG*****ACUCAAGACUCGCGAAGGCCGCCC*****GAGGGGCGGCCUUUCGUGUUUUC

SVE_trpE *****AUGUUCGCGCACUCGACCCGGAACUGGUGGUGGACCGCUCACCCGGCG*GCCCACUGACUUGCGCGU*****ACACGGAUCACACGCACAGGCCGCCC*****GAGGGGCGGCCUUUCUCG****

Tfu_trpE *****AUGCGACCGGCACUGACUUCCAGCAGUGGUGGCGCGCUGGUAAGCGGCGCUUCUGGUUCGCAU*****UCCUGAGACCUGCCGACCGCC*****GGACCGGCGGUCGUUUCUGUUGUC*

nfa_trpS UGGCCUCGAACCAGCCGAUCUCACGCCGAGGCGCGGAUGGUGGCGUCGUACCUGAUGGGGCAACGGGUGCCCUACCCG*****CUGCCGGUGCCCGCCAGCAGGU*****CACCGGCGGGUACUACCUGCUCGU*

SACE_trpS *****AUGUGGUGGCGCGCCAC*GGGCG*GCCCGACGCUUCGCGCACUGACCAACGCGAACCGGUCGCCAUCAGGCGGCCGACGCGAAUCGCGGUCAUCCUGUGGCGGCAGAGACC*

б) *trpB*:

BH AUGUGUUGGUGGUGGCGAGUAAUGCGAUAGGAACGUUUUACCCAUUUUUAGAGGAUGACGUGAAGCUUAUCGGCGUGGAAGCGCGGGCAAAGGAGUCGAGACUUCUCAACAUCGCGCAGCAUU**ACGAAAGGAAGAGUAGGUGUCUUUACGGAUCGAUGACCUCUUGCUUCAG

BALH UUGUAUUGGUGGUGGAGUAAACGCAAUUGGAAUGUUUAUCCGUUCGUACACGAAGAAGAUUGCUCUUUACGGCGUAGAAGCAGCUGGAAAAGGUGUUAUACAGAAAAGCAUGCAGCAACUUUAACGAAAGGAAGCGUCGUGUUUACACGGAU**CAAUGAUGAUUUUUA