

Fig. 16. Classic attenuation regulation of gene *trpE* in γ -proteobacteria. Designations as in Figure 4. Duplications of the gene's regulatory region are marked with "#".

SKA_trpE AUGUUACAGCAAUUCAAAAUCAACAAUGCGUUUUUCUCAAUAAUUGGUGGUGGCACUCCUACUUACGGGCAGUGUGAAUAGCUGUAAUUCAG*****CAAUAUACAAACGAGCCCGCAUCAAA*****UGCGGGCUUUUUUA
PBPR_trpE AUGUUACAGCAAUUAAACCGACAGCUUCGCGUUUUUCUUAUCUCAUGGUGGUGGCACUUCUUAUACGGGUUGUGUGAUUUCUGUUCUUAAC*****GGACAGAAUAGACAUAAGCCCGCCAGA*****UGCGGGCUUUUUA
SO_trpE *****AUGACUCAGAUUAACGCUUCUUAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUAGUGUGAAGCUCUGUGCUA*****UUUGAAAGUAACAGAAUCAACAGAAAGCCCGCAGAAA*****UGCGGGCUUUUUU
Sbal_trpE *****AUGACACACAUUAACGCUUCAUUAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****UUUGAAAGUGACCAGAAUCAACAGAAAGCCCGCAGAAA*****UGCGGGCUUUUUUG
Sput_trpE *****AUGACCCACAUUAACGCUUCAUUAACAUCUAUUGGUGGUGGCACUUCUCCAACGUAGCGGGUGUGUGAAGCUCUGUGCUA*****UUUGAAAGUGACCAGAAUCAACAGAAAGCCCGCAGAAA*****UGCGGGCUUUUUUG
Sputw_trpE *****AUGACCCACAUUAACGCUUCAUUAACAUCUAUUGGUGGUGGCACUUCUCCAACGUAGCGGGUGUGUGAAGCUCUGUGCUA*****UUUGAAAGUGACCAGAAUCAACAGAAAGCCCGCAGAAA*****UGCGGGCUUUUUUG
Spea_trpE *****AUGACACAGUUAACAACUUCUCAAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUCUUG
Shew_trpE *****AUGACGACGAGCUUAUCAACAUCUAUUGGUGGUGGCACUUCUCCAACGUAGCGGGUGUGUGAAGCUCUGUGCUA*****UGUAAAAGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
Ssed_trpE *****AUGAACACAUUUUCAAGCAACAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****UGUAAAAGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
Swoo_trpE *****AUGAACAUUUUUUCAAGCAACAACAUCUAUUGGUGGUGGCACUUCUCCAACGUAGCGGGUGUGUGAAGCUCUGUGCUA*****UGUAAAAGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
Sfri_trpE *****AUGACACACUUCUAGCUUCAUAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****UUUUUAAAGAGACAAGAUAUCAACAGAAAGCCCGCAGAGA*****UGUGGGCUUUUCUUG
Sden_trpE *****AUGACACACUCAAACGCAUUUCAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****AUUGACACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
Sama_trpE *****AUGAACCCAAUCAUGCUUCUUAUCAACAUCGUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****UUUAACAGACAAGAUAUCAACAGAAAGCCCGCACUA*****UGCGGGCUUUUUUG
ASA_trpE *****AUGCAAACGACUUCUACUCCAGCAUCUUGGUGGUGGCACUUCUCCAACGUAGCGGGUGUGUGAAGCUCUGUGCUA*****UGUAAAAGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
AHA_trpE *****AUGCAAACGACUUCUACUCCAGCAUCUUGGUGGUGGCACUUCUCCAACGUAGCGGGUGUGUGAAGCUCUGUGCUA*****UGUAAAAGAGACAAGAUAUCAACAGAAAGCCCGCAGAGA*****UGCGGGCUUUUUUG
CPS_trpE *****AUGAACACAGCAAUAACAACAUCUAUUGGUGGUGGCACUUCUCCAACGUAGCGGGUGUGUGAAGCUCUGUGCUA*****UUUUUAAAGAGACAAGAUAUCAACAGAAAGCCCGCAGAGA*****UGUGGGCUUUUCUUG
SFW_trpE *****AUGAAAGCAAUUUCGUAUGAAAGGUGGUGGC*GCACUCC*UGAAACGGGCAGUGUAUUCACCAUGCGUAAA*****GCAAUCAGAUACCCAGCCCGCUAAU*****GAGCGGGCUUUUUU
SbBS512_trpE *****AUGAAAGCAAUUUCGUAUGAAAGGUGGUGGC*GCACUCC*UGAAACGGGCAGUGUAUUCACCAUGCGUAAA*****GCAAUCAGAUACCCAGCCCGCUAAU*****GAGCGGGCUUUUUU
SSON_trpE *****AUGAAAGCAAUUUCGUAUGAAAGGUGGUGGC*GCACUCC*UGAAACGGGCAGUGUAUUCACCAUGCGUAAA*****GCAAUCAGAUACCCAGCCCGCUAAU*****GAGCGGGCUUUUUU
SDY_trpE *****AUGAAAGCAAUUUCGUAUGAAAGGUGGUGGC*GCACUCC*UGAAACGGGCAGUGUAUUCACCAUGCGUAAA*****GCAAUCAGAUACCCAGCCCGCUAAU*****GAGCGGGCUUUUUU
CKO_trpE *****AUGAAAGCAAUAUCGUAUGAAAGGUGGUGGC*GCACUCC*UGAAUUCGGGCAGUGUAUGACGUGCAUA*****AGCAAACAGAUACCCAGCCCGCAGAU*****GAGCGGGCUUUUUU
Ent_trpE *****AUGAAAGCAAUUUCGUAUGAAAGGUGGUGGC*GCACUCC*UGAAUUCGGGCAGUGUAUUCGUGGCUU*****ACGAAACAGAUACCCAGCCCGCACUA*****UGCGGGCUUUUUU
ESA_trpE *****AUGACUCACAUUUUCGUAUGAAAGGUGGUGGC*GUACUCC*UGAAUUCGGGCAGUGUAUUCACCAUGCGUAAA*****GCAAUCAGAUACCCAGCCCGCUAAU*****GAGCGGGCUUUUUU
PE36_trpE *****AUGCAAAUAUUAACAACAACAUCAGUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUCUUG
IL_trpE *****AUGUUUUACGCAACAACAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****AAUAGCUCUACUUUAGAAAGCCCGCUAAU*****GAGCGGGCUUUUUU
OS_trpE *****AUGCAACUCGCAAAUUUCACUAACAAGCUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****UAAUAGAGUAAGUUCGAAAGCCCGCUAAU*****GAGCGGGCUUUUUU
Pat1_trpE *****AUGAAUACAGUAUUAACAACAACAUCAGUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
PSHAa_trpE *****AUGAACAAUUCUUAACAACAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
PTD2_trpE#1 *****AUGAAUACUUCAGUUAACAACAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****AAUAGCUCUACUUUAGAAAGCCCGCUAAU*****GAGCGGGCUUUUUU
PTD2_trpE#2 *****AUGAAUACUUCAGUUAACAACAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****AAUAGCUCUACUUUAGAAAGCCCGCUAAU*****GAGCGGGCUUUUUU
MADE_trpE *****AUGCAUCCUUAACAACAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
ATW7_trpE#1 *****AUGAACAAUUCUUAACAACAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
ATW7_trpE#2 *****AUGAAUAACGGUAUUAACAACAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
EcE_trpE *****AUGAAAGCAAUUUCGUAUGAAAGGUGGUGGC*GCACUCC*UGAAUUCGGGCAGUGUAUUCGUGGCUU*****ACGAAACAGAUACCCAGCCCGCACUA*****UGCGGGCUUUUUU
t_trpE *****AUGCAGCAGUAUUUCGUAUGAAAGGUGGUGGC*GUACUCC*UGAAUUCGGGCAGUGUAUUCACCAUGCGUAAA*****GCAAUCAGAUACCCAGCCCGCUAAU*****GAGCGGGCUUUUUU
STY_trpE *****AUGGCAGCAGAUUUGCAUUAACAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
STM_trpE *****AUGCAGCAGCAUUUGCAUUAACAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
KPN_trpE *****AUGCACUUUAACAACAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
Ping_trpE *****AUGAUUUUAACAACAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
PCNPT3_trpE *****AUGAUUUUAACAACAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
Spro_trpE *****AUGAAUUAACAACAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
ECA_trpE *****AUGAAAGCAAUUUCGUAUGAAAGGUGGUGGC*GCACUCC*UGAAUUCGGGCAGUGUAUUCGUGGCUU*****ACGAAACAGAUACCCAGCCCGCACUA*****UGCGGGCUUUUUU
YPN_trpE *****AUGAAGCAUCCCGUAUUUCGUAUGAAAGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
YberA_trpE *****AUGAAAACCAUCUGAUCUCCUACUGCGUUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
YE_trpE *****AUGAAAACUCCUUAUUUCGUAUGAAAGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
YintA_trpE *****AUGAAAACUCCCGUAUUUCGUAUGAAAGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
YfreA_trpE *****AUGAAAACUCCCGUAUUUCGUAUGAAAGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
Ymol_trpE *****AUGAACCAUUCGUAUCUCCUACUGCGUUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
YpsIP_trpE *****AUGAAAACUCCCGUAUUUCGUAUGAAAGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
plu_trpE *****AUGACGCUUAUCCGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
SG_trpE *****AUGAAAACUCCCGUAUUUCGUAUGAAAGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
VAS14_trpE **AUGUUACAGCAAUUCAAAAUCAACAAUGCGUUUUUCUCAAUAAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
VIBHAR_trpE *****AUGAAUUCGAGAUUCUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
VSAK1_trpE *****AUGGUUAUUCUUAACAAGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
VF_trpE2 *****AUGUCACAGCUUAACAACAACAUCUAUUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
VC_trpE AAAGCGAAACUUGCUCUGCAUUAUUACAGUCCAGCGGAUGCUGAACUGGUCUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
VV_trpE AAAGCGAAACUUGCUCUGCAUUAUUACAGUCCAGCGGAUGCUGAACUGGUCUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
VP_trpE AAAGCGAAAGUUGCUGUUUGCUUAAUAAAGCAACAACAUCAGAUUCGUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
VEx2w_trpE AAAGCGAAAGUUGCUGUUUGCUUAAUAAAGCAACAACAUCAGAUUCGUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
Vl2G01_trpE AAAGCGAAAGUUGCUGUUUGCUUAAUAAAGCAACAACAUCAGAUUCGUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
Vl2B01_trpE AAAGCAUAAAGUUUAGAACUUCUUAUAAAGCAACAACAUCAGAUUCGUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG
VSWAT3_trpE AAAGCAUAAAGUUUAGAACUUCUUAUAAAGCAACAACAUCAGAUUCGUGGUGGUGGCACUUCUCCAAUUAGCGGGUGUGUGAAGCUCUGUGCUA*****GAAACUGAGACAAGAUAUCAACAGAAAGCCCGCAUACA*****UGCGGGCUUUUUUG