Fig. 7. Classic attenuation regulation: a) *thrA* gene in α-proteobacteria, b) *thrA* and *thrS* genes in δ-proteobacteria. Designations as in Figure 4, alignment is absent. Paralogs of *thrS* designated as numbers. In *Bdellovibrio bacteriovorus* (Bb thrS1) the antiterminator (double underlined) does not fully overlap with the terminator and requires a co-antiterminator (single underlined). Antiterminator and co-terminator (in blue) do not coexist.

a) *thrA:*

OM2255

AUGAUUAUUAUUACCACCCUUGUCAGGGCGGACGUUGGU***UAG***UGCAUGUUCACAAAUCAUCUGAAGCCCGCUAAAGUAGCGGGCUUUUUUGUUUUACCAGUAUCAAUUUUUCGAACUAGGAGUUCAC

b) *thrA, thrS:*

MXAN_thrA

GUGCUG**ACCACCACCACCACGACCACGACGACU**CCCCGCCGGGCGCGGGUGGUC***UAG***CGACGGAACCACCUUGGUUUCCAGCUCGGCCCCGCGCUCUCCGGCGCGGGGCUUUUUUGUUUUCACAUGCCGCAGGAGCCCCGACAUGCAGCCCUCCUCGCAGUCG

Bd_thrS1

AUGAAUUUG**AUUACGACA**GAU**AUU**AAA**ACA**AGAAGUUUGCAGAGCUCUCUUGCGAAGUCUGCA**ACGACA**AAC***UAG***ACGGCGCACUUAAGCGACGCUAGAAUUUAACUUAAAUUACUCCGGCGAAGCCGGAGUGUAAGCCAGUGGAGGUUUACCAUUAGCAAGUUUGAA

MXAN_thrS1

GUGAGCUUCGUC**AUCACCACCACGACCACC**GGC**ACCACGACU**CGCUUCGGCGGGCGUGGA**ACC**GUGCGCGUC**ACG**UGG***UGA***GCUGACGAACGCACGGUUCCCUGCCCCGCCUUCUCCGGCCGGGGCAACCGUGCGCUCGCUCAGCGCUCCGACCGGAUGGCGUUUCAC

STIAU_thrS1

ACCAGC**AUG**AAGUUCAGCCAGCUC**ACGACU**CGC**ACGACCACU**CCCCGC**ACC**GGCGGGCGAGCGGCUGUGCGC**ACG*UAA***GCUGAGCGCGCGGACACCGCAGCCCCGCCGGGACAUCCGGACUGGGGGCGCACCGCGCGAAUCGCUUCACCCCCGCUCCGGAC

Bd_thrS2

AUGAGCUUUGACCUGUCUUUCAGCCUC**AUU**CUUGUUUUCGCC**ACC**CCGGCG**ACCACC**CCG***UAG***GGGUCUAUAAUCUAUUGGCCGCCCAACUGGCGGCCCCGACGCAUUUUUCCAUAUUUUUAUAAAAUUUUAAGAUCCGCUGAAGCGGAGAGAGAUUUAUU