

Table 6: SIGffRid results compared with known SFBS motifs in *E. coli*/*S. typhimurium* on one hand, and *B. subtilis*/*B. licheniformis* on the other hand

■	σ factor: name [known/deduced consensus if available]
■	known promoters (when no consensus can be clearly deduced)
□	SIGffRid output motifs

Motifs are presented as follow: DNA_motif (R ratio, LRT likelihood ratio test).
(for *E. coli*: $R \geq 0.50$, $LRT \geq 3.84$; for *S. typhimurium*: $R \geq 0.48$, $LRT \geq 3.84$)

SIGffRid results for *Escherichia coli*/*Salmonella typhimurium* pair.

σ factor: σ^{70} <i>ttgacan</i> _{16,18} <i>tataat</i> [1]	
SIGffRid output motifs (spacer range: 14 to 20)	
<i>E. coli</i>	<i>S. typhimurium</i>
<i>tggnan</i> _{16,18} <i>tataat</i> (0.52, 6.40)	<i>tn₂cn</i> _{17,19} <i>tataatg</i> (0.52, 21.86) <i>tngn</i> _{19,20} <i>tataatg</i> (0.49, 12.72)
<i>tggnan</i> _{15,18} <i>tataat</i> (0.53, 7.18)	
<i>tn₂cn</i> _{17,19} <i>tataatg</i> (0.54, 11.30)	
σ factor: RpoS ? <i>n₇ctatact</i> [2]*	
SIGffRid output motifs (spacer range: 14 to 20)	
<i>E. coli</i>	<i>S. typhimurium</i>
<i>tn₂an</i> _{17,19} <i>tatact</i> (0.73, 10.10)	<i>tn₂an</i> _{17,19} <i>tatact</i> (0.49, 41.75)
<i>tn₃an</i> _{17,19} <i>tatact</i> (0.51, 15.40)	
<i>tn₃an</i> _{16,18} <i>tatact</i> (0.51, 15.43)	
<i>cn₂gn</i> _{17,19} <i>ctataat</i> (0.59, 10.69)	
<i>tn₁tn</i> _{18,20} <i>tatact</i> (0.55, 6.79)	
<i>tn₃tn</i> _{16,18} <i>tatactg</i> (0.50, 6.36)	<i>tn₃tn</i> _{16,18} <i>tatactg</i> (0.50, 16.79)

*No -35 box is clearly defined.

Motif putatively recognized by a transcription factor	
SIGffRid output motifs (spacer range: 14 to 20)	
<i>E. coli</i>	<i>S. typhimurium</i>
<i>tggn</i> _{19,21} <i>tacaat</i> (0.53, 9.24)	<i>tataan</i> _{14,17} <i>ttattt</i> (0.66, 13.05, x3) <i>tn₃tn</i> _{14,16} <i>gtatact</i> (0.53, 12.70) <i>tnan</i> _{16,18} <i>gtatact</i> (0.74, 20.21) <i>tgtgatn</i> _{11,13} <i>ttta</i> (0.54, 14.29)
<i>tn₃tn</i> _{14,16} <i>gtatact</i> (0.62, 6.84)	
<i>anan</i> _{15,17} <i>tgtat</i> [ag] (0.54, 39.94)	
<i>anan</i> _{14,16} <i>gtataat</i> (0.75, 8.17)	
<i>tngn</i> _{18,19} <i>gtataat</i> (0.60, 6.67)	

SIGffRid results for *Bacillus subtilis*/*Bacillus licheniformis* pair.
(for *B. subtilis*: $R \geq 0.51$, $LRT \geq 3.84$; for *B. licheniformis*: $R \geq 0.52$, $LRT \geq 3.84$)

σ factor: SigA <i>ttgacan</i> _{16,18} <i>tataat</i> [3]	
SIGffRid output motifs (spacer range: 14 to 20)	
<i>B. subtilis</i>	<i>B. licheniformis</i>
<i>ttgan</i> _{18,19} <i>tataat</i> (0.77, 43.47)	<i>ttgan</i> _{18,20} <i>tataat</i> (0.79, 63.87)
<i>ttgacn</i> _{18,19} <i>taaaat</i> (0.76, 12.85)	<i>ttgacn</i> _{17,19} <i>taaaat</i> (0.66, 11.65)
<i>ttgacn</i> _{18,20} <i>ataat</i> (0.71, 43.15)	<i>ttgacn</i> _{17,19} <i>tata</i> (0.55, 53.42)
<i>ttn</i> ₂ <i>cn</i> _{18,19} <i>tataatt</i> (0.68, 23.73)	<i>ttn</i> ₂ <i>cn</i> _{18,20} <i>tataat</i> (0.53, 70.88)
<i>ttn</i> ₂ <i>cn</i> _{17,19} <i>tataata</i> (0.57, 30.48)	<i>ttn</i> ₂ <i>cn</i> _{17,20} <i>tataat</i> (0.52, 83.85)
<i>ttgacn</i> _{17,19} <i>tataa</i> (0.67, 29.71)	<i>ttgacn</i> _{19,21} <i>taata</i> (0.68, 22.84)
<i>ttgacn</i> _{16,18} <i>tataa</i> (0.57, 18.10)	<i>ttgacn</i> _{17,20} <i>tataa</i> (0.66, 32.51)
	<i>ttgacan</i> _{18,19} <i>anant</i> (0.53, 42.90)
	<i>ttgacaan</i> _{17,18} <i>anant</i> (0.83, 30.80)
	<i>ttgacan</i> _{17,18} <i>tan</i> ₂ <i>a</i> (0.58, 41.75)
	<i>ttgaan</i> _{17,18} <i>tataat</i> (0.83, 12.46)
<i>ttgn</i> _{18,20} <i>ctataat</i> (0.67, 28.56)	<i>ttgn</i> _{18,20} <i>ttataat</i> (0.72, 41.17)
	<i>tn</i> ₂ <i>an</i> _{16,18} <i>ctataat</i> (0.55, 26.28)
	<i>antn</i> _{18,21} <i>ctataat</i> (0.53, 23.48)
<i>ttgn</i> _{19,20} <i>tacaata</i> (0.52, 12.68)	<i>ttgn</i> _{19,20} <i>tacaata</i> (0.81, 19.48)
	<i>tn</i> ₃ <i>an</i> _{17,18} <i>tacaata</i> (0.52, 12.68)
	<i>tn</i> ₃ <i>an</i> _{16,18} <i>tataata</i> (0.54, 23.82)
<i>ttgacn</i> _{17,19} <i>ataat</i> (0.62, 25.62)	<i>tn</i> ₃ <i>an</i> _{17,19} <i>tataata</i> (0.55, 24.40)
<i>gacan</i> _{16,18} <i>tataat</i> (0.60, 16.93)	<i>ttgacn</i> _{17,19} <i>ataat</i> (0.60, 22.95)
	<i>gacan</i> _{16,19} <i>tataat</i> (0.59, 13.63)
	<i>gacan</i> _{15,18} <i>tataat</i> (0.57, 13.37)
<i>ttgn</i> _{18,20} <i>tataat</i> (0.58, 79.09)	<i>ttgn</i> _{19,21} <i>tataat</i> (0.62, 98.65)
	<i>ttgn</i> _{18,21} <i>tataat</i> (0.59, 99.07)
<i>tnanan</i> _{15,17} <i>tataat</i> (0.51, 39.02)	<i>tngncn</i> _{17,19} <i>tataat</i> (0.61, 50.60)
<i>tngn</i> _{19,21} <i>tataata</i> (0.59, 51.90)	<i>tngncn</i> _{17,18} <i>tataat</i> (0.74, 48.24)
	<i>tgn</i> _{16,18} <i>tataat</i> (0.64, 47.86)
<i>tn</i> ₂ <i>cn</i> _{18,20} <i>tataata</i> (0.57, 30.48)	<i>tn</i> ₂ <i>can</i> _{16,18} <i>tataat</i> (0.57, 51.72)
<i>tnan</i> _{17,19} <i>tataat</i> [<i>ga</i>] (0.53, 76.73)	<i>tnan</i> _{16,20} <i>tataatg</i> (0.56, 44.52)
<i>tn</i> ₂ <i>acn</i> _{17,19} <i>tataat</i> (0.51, 47.73)	<i>tn</i> ₂ <i>acn</i> _{17,19} <i>tataat</i> (0.63, 61.48)
	<i>tn</i> ₂ <i>acn</i> _{17,18} <i>tataat</i> (0.68, 49.09)
	<i>ttn</i> ₂ <i>cn</i> _{18,18} <i>tataatg</i> (0.70, 13.88)
	<i>ttn</i> ₂ <i>an</i> _{16,19} <i>tataatg</i> (0.56, 16.61)
	<i>ttn</i> ₂ <i>an</i> _{17,19} <i>tataata</i> (0.64, 14.71)
<i>ttn</i> ₂ <i>cn</i> _{16,18} <i>tataata</i> (0.51, 21.54)	
<i>ttgacan</i> _{14,15} <i>tn</i> ₂ <i>ta</i> (0.52, 36.05)	
<i>ttgacan</i> _{16,17} <i>ataa</i> (0.57, 10.36)	
<i>ttn</i> ₂ <i>tn</i> _{17,19} <i>tataat</i> (0.52, 22.78)	

<p><i>tgn₂an_{16,18}tataat</i> (0.54, 40.24) <i>tngncn_{17,19}tataata</i> (0.75, 24.50) <i>ttgcn_{18,20}tataat</i> (0.53, 20.08)</p> <p><i>ttgan_{17,18}ctataa</i> (0.54, 11.53) <i>tgn₂an_{15,17}tataat</i> (0.53, 9.56) <i>tngn_{18,20}gtataat</i> (0.66, 37.73)</p> <p><i>tgn₂tn_{16,17}tataat</i> (0.52, 32.43) <i>antngn_{19,21}tataat</i> (0.59, 37.05) <i>tn₂tn_{17,19}tataata</i> (0.52, 22.78) <i>tntnan_{16,18}ttataat</i> (0.61, 23.75) <i>tntn_{18,20}tataatag</i> (0.76, 27.76)</p> <p><i>gttgacn_{18,20}tan₂a</i> (0.59, 40.73) <i>gttgacan_{18,19}an₂at</i> (0.54, 11.35)</p> <p><i>ganan_{17,18}tataat</i> (0.63, 24.93)</p> <p><i>tntn_{16,18}gttataat</i> (0.59, 16.73)</p> <p><i>attgacan_{17,19}an₂at</i> (0.56, 27.34)</p>	<p><i>tgn₂an_{16,18}tataat</i> (0.53, 30.83) <i>tngncn_{17,19}tataata</i> (0.76, 26.33) <i>ttgcn_{18,20}tataat</i> (0.56, 23.09) <i>tn₂cn_{18,20}tataata</i> (0.53, 36.66) <i>tn₂cn_{16,18}ttataata</i> (0.65, 21.65) <i>tn₂an_{17,19}ttataat</i> (0.52, 34.59) <i>tn₂an_{16,19}tataatt</i> (0.52, 30.55) <i>antnan_{18,20}tataat</i> (0.54, 21.75) <i>ttgcaan_{16,17}tana</i> (0.53, 18.09) <i>ttgan_{18,20}atataa</i> (0.53, 9.19) <i>tgn₂an_{16,18}tataata</i> (0.67, 16.36) <i>tngn_{18,20}ttataat</i> (0.53, 36.81) <i>tngn_{19,21}tataatt</i> (0.59, 29.85)</p> <p><i>ttan_{16,19}tataata</i> (0.53, 7.32) <i>tntnan_{17,19}tataat</i> (0.57, 39.73) <i>tnan_{17,20}tataat[ag]</i> (0.58, 74.99) <i>tnan_{16,20}tataata</i> (0.58, 40.62) <i>tnan_{16,19}tataatt</i> (0.59, 34.69) <i>tnan_{17,19}tataatt</i> (0.58, 26.66) <i>tnanan_{15,17}tataat</i> (0.59, 34.03) <i>tn₂an_{16,20}tataat[ag]</i> (0.53, 73.84)</p> <p><i>gtn₂an_{18,20}tataat</i> (0.53, 20.13)</p> <p><i>acntn_{14,16}tataat</i> (0.63, 34.78) <i>tan₂gn_{19,21}tataat</i> (0.56, 18.90) <i>an₂gn_{18,19}ttataat</i> (0.59, 21.30) <i>tn₂tn_{16,19}gttataa</i> (0.54, 24.08) <i>tn₂tgn_{18,20}tataat</i> (0.53, 36.95) <i>tn₂tgn_{19,20}tataat</i> (0.55, 32.18) <i>tattgacn_{17,20}anant</i> (0.61, 17.11) <i>atn₂an_{18,20}tataat</i> (0.54, 28.27) <i>tattgacn_{18,20}an₂at</i> (0.62, 19.88) <i>tattgacn_{18,20}anant</i> (0.64, 17.88) <i>tattgacan_{18,19}an₃t</i> (0.68, 14.96) <i>tattgacan_{19,20}tn₂t</i> (0.54, 8.14)</p>
σ factor: SigW <i>tgaaacn_{16,17}cgta</i> [4]	
SIGffRid output motifs (spacer range: 14 to 20)	
<i>B. subtilis</i>	<i>B. licheniformis</i>
<i>tgaaacn_{16,17}cgtat</i> (0.74, 17.71) (found 15 times)	<i>tgaaacn_{16,17}cgta</i> (0.69, 22.09) (found 18 times)

Motif putatively recognized by transcription factors	
SIGffRid output motifs (spacer range: 14 to 20)	
<i>B. subtilis</i>	<i>B. licheniformis</i>
<i>attgacan</i> _{13,15} <i>tn</i> ₂ <i>ta</i> (0.60, 21.70)	<i>attgacan</i> _{14,15} <i>tn</i> ₂ <i>t</i> (0.53, 8.05)
<i>atttn</i> _{13,15} <i>tataat</i> (0.52, 22.36)	<i>attttn</i> _{12,15} <i>tataat</i> (0.58, 16.05)
	<i>atttn</i> _{13,17} <i>tataat</i> (0.54, 29.78)
	<i>atttn</i> _{13,16} <i>tataat</i> (0.57, 29.45)
	<i>atttn</i> _{12,16} <i>tataat</i> (0.54, 29.33)
<i>ttn</i> _{13,15} <i>tataata</i> (0.56, 27.57)	
<i>tataatan</i> _{12,14} <i>aaa</i> (0.56, 11.98)	<i>tataat</i> [<i>tg</i>] <i>n</i> _{13,17} <i>aaa</i> (0.56, 20.28)
	<i>aan</i> _{13,17} <i>tataatg</i> (0.56, 11.08)
<i>tataatn</i> _{14,16} <i>ataa</i> (0.52, 10.23)	<i>tataatn</i> _{14,16} <i>ataa</i> (0.64, 9.31)
<i>tttn</i> _{16,18} <i>tataata</i> (0.53, 12.05)	<i>ttttn</i> _{12,16} <i>tataat</i> (0.55, 8.28)
<i>cntn</i> _{19,21} <i>tataat</i> (0.54, 31.42)	<i>cntnan</i> _{15,19} <i>tataat</i> (0.67, 52.77)
<i>gn</i> ₂ <i>gn</i> _{14,18} <i>tegtccct</i> (0.58, 18.83)	
<i>gn</i> ₂ <i>gn</i> _{15,17} <i>tegtccct</i> (0.64, 16.57)	
<i>gn</i> ₂ <i>gn</i> _{14,16} <i>tegtccct</i> (0.53, 12.78)	
<i>ggn</i> _{17,20} <i>cgteccct</i> (0.53, 12.85)	<i>ggtggn</i> _{13,17} <i>tegtcc</i> (0.69, 19.12)
<i>an</i> ₃ <i>tn</i> _{14,19} <i>tatacta</i> (0.58, 34.36)	<i>anantn</i> _{14,17} <i>atacta</i> (0.58, 17.57)
	<i>an</i> ₃ <i>tn</i> _{13,20} <i>tatacta</i> (0.61, 36.86)
<i>tn</i> ₂ <i>an</i> _{17,19} <i>tatacta</i> (0.56, 22.24)	<i>tn</i> ₂ <i>an</i> _{17,19} <i>tatacta</i> (0.64, 23.29)
<i>tn</i> _{15,17} <i>tatacta</i> (0.62, 32.00)	<i>tn</i> ₂ <i>tn</i> _{17,20} <i>tatacta</i> (0.52, 21.38)
<i>tn</i> _{19,21} <i>tatacta</i> (0.59, 22.71)	<i>tn</i> _{19,21} <i>tatacta</i> (0.59, 22.71)
	<i>anan</i> _{15,18} <i>tatacta</i> (0.62, 16.52)
<i>tatactan</i> _{16,18} <i>aaa</i> (0.55, 4.79)	
	<i>attn</i> _{16,18} <i>atacta</i> (0.59, 23.16)
<i>ttn</i> _{11,13} <i>tatacta</i> (0.54, 9.64)	<i>ttgn</i> _{19,20} <i>tatacta</i> (0.88, 16.69)
	<i>ttgn</i> _{17,20} <i>tatacta</i> (0.75, 19.84)
	<i>acttn</i> _{14,16} <i>tataat</i> (0.68, 17.10)
	<i>cattn</i> _{14,16} <i>tataat</i> (0.52, 15.79)

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