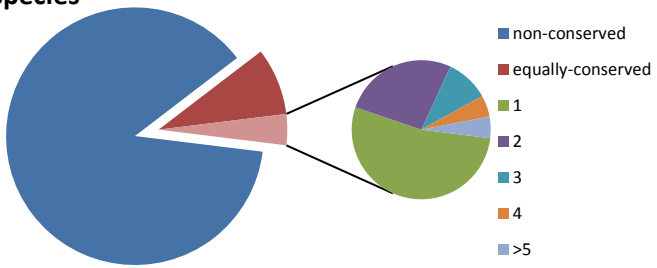
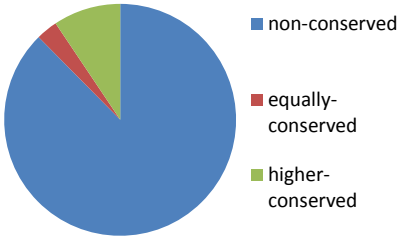
S. aureus

Within genus : BLAST in 20 species

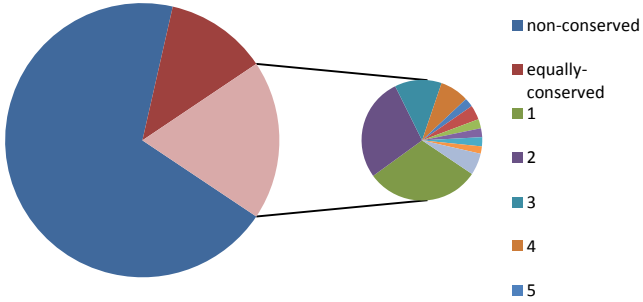


Outside genus

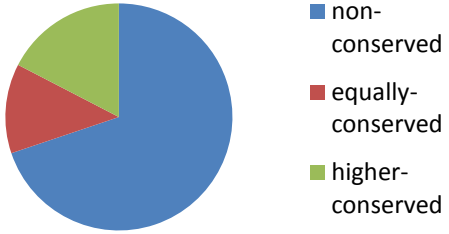


S. pneumoniae

Within genus : BLAST in 41 species

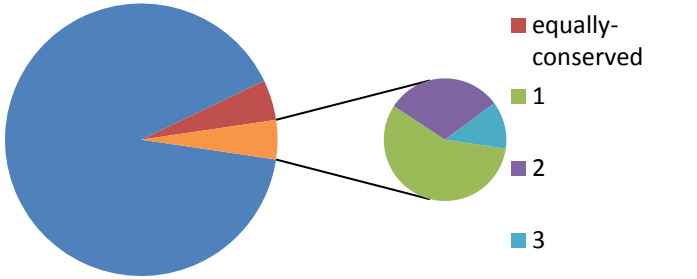


Outside genus

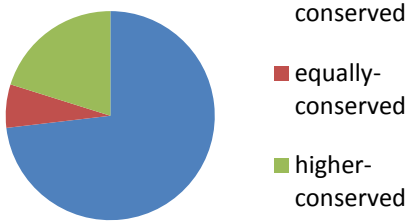


E. faecalis

Within genus : BLAST in 31 species

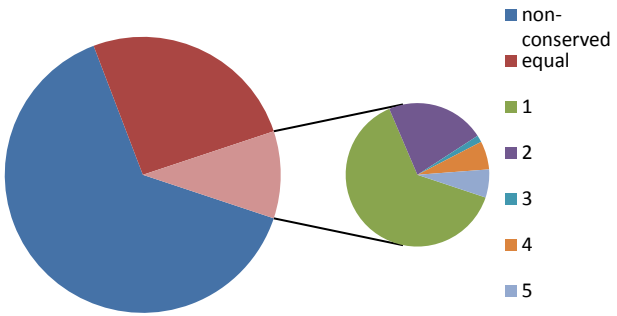


Outside genus

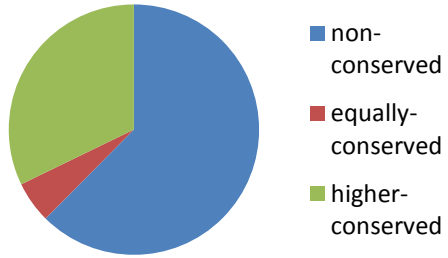


H. pylori

Within genus : BLAST in 42 species

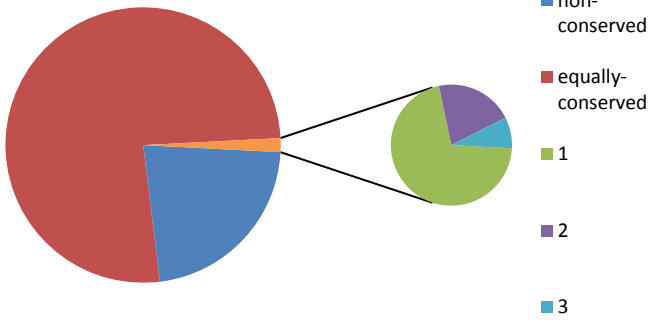


Outside genus

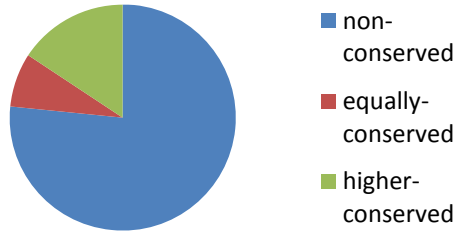


L. monocytogenes

Within genus : BLAST in 42 species

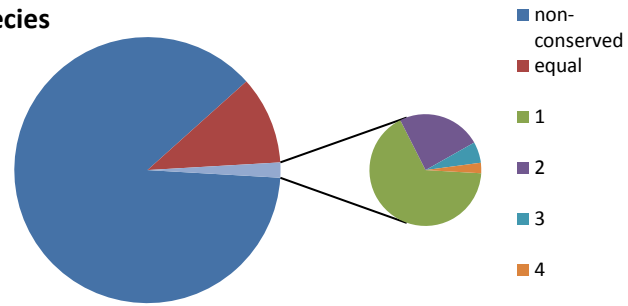


Outside genus

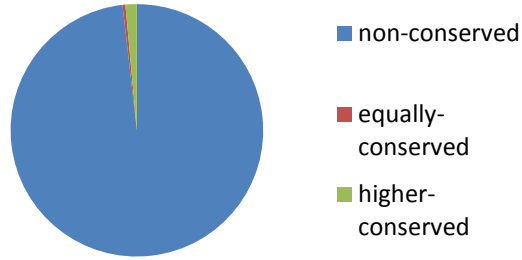


P. aeruginosa

Within genus : BLAST in 29 species

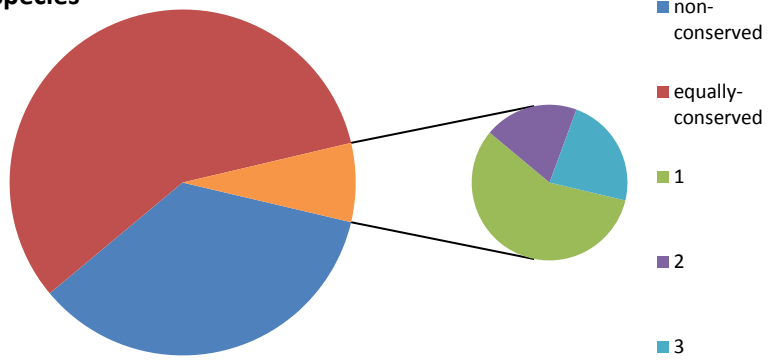


Outside genus

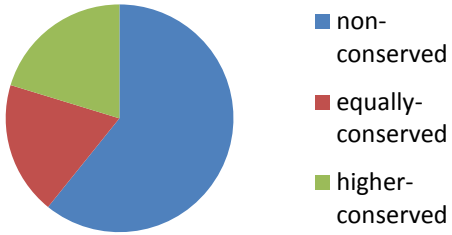


S. typhi

Within genus : BLAST in 7 species

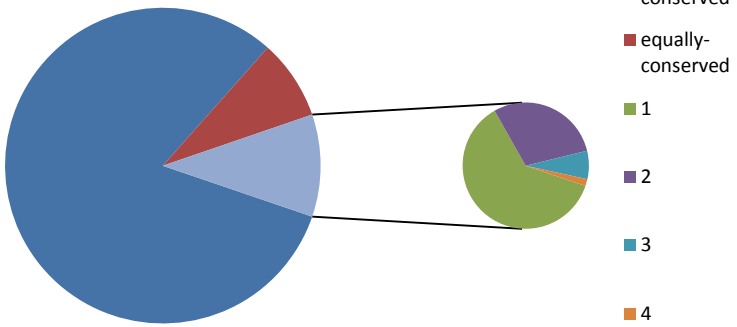


Outside genus

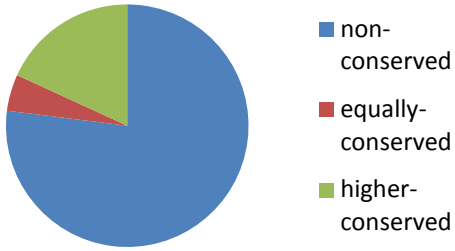


V. harveyi

Within genus : BLAST in 11 species

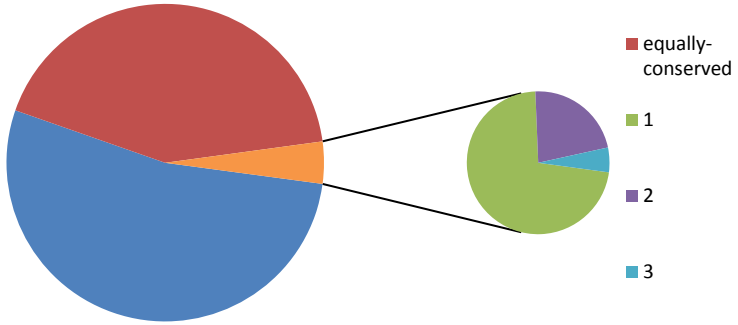


Outside genus

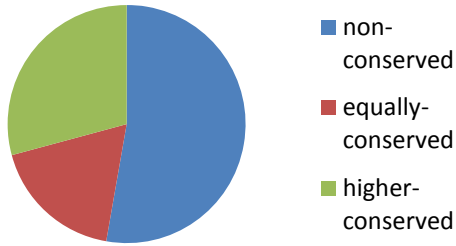


C. trachomatis

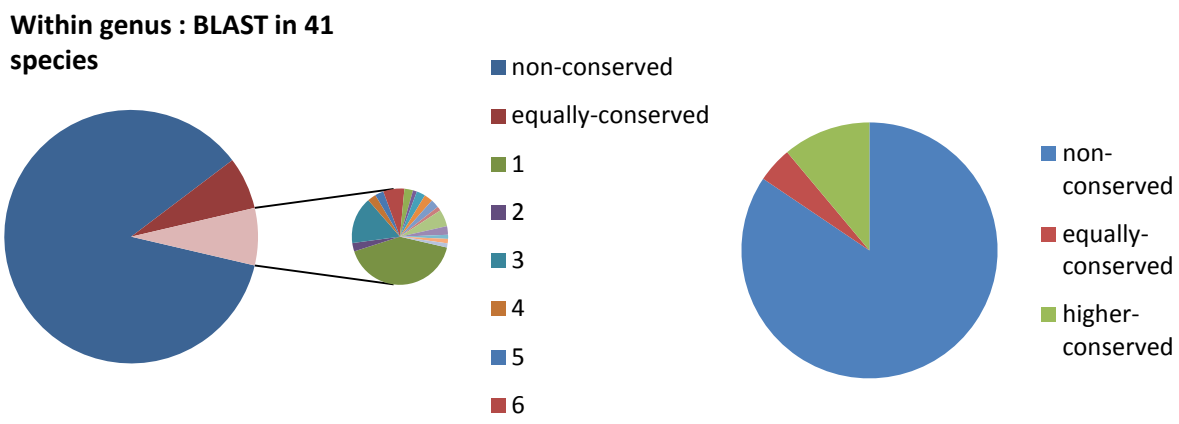
Within genus : BLAST in 4 species



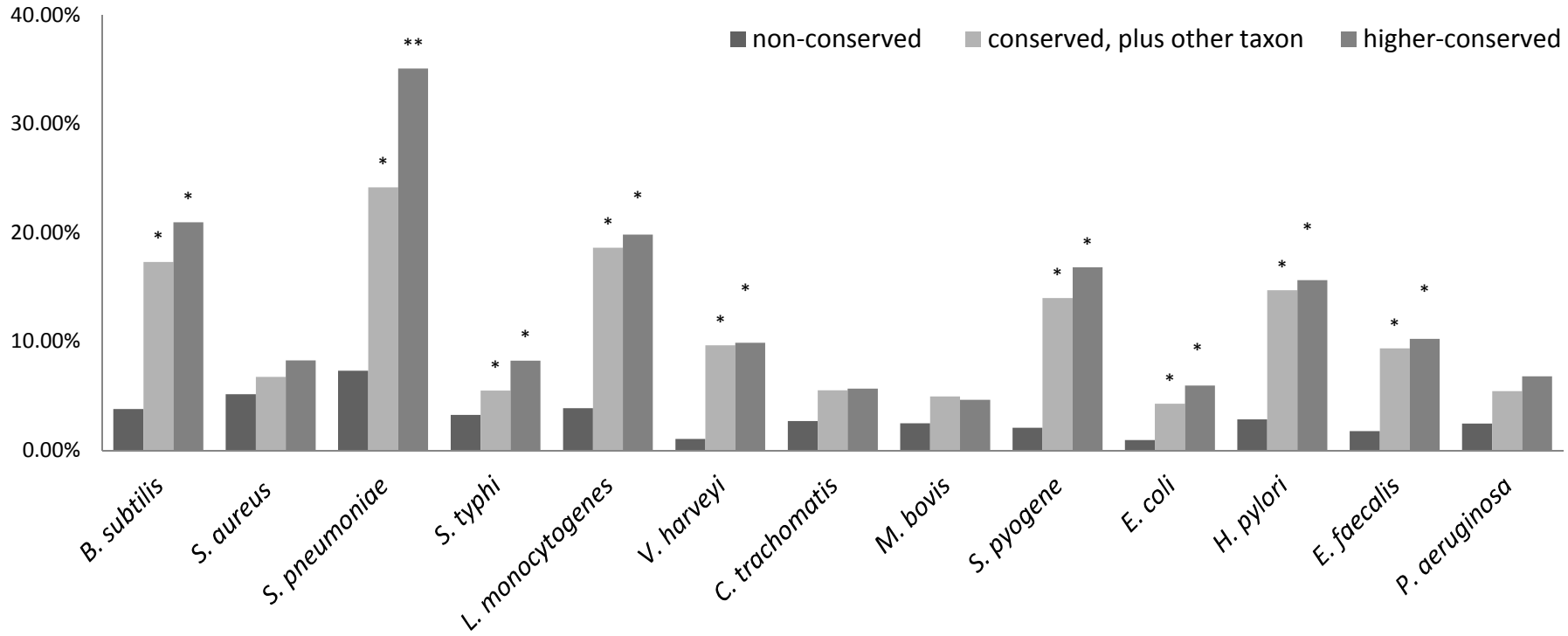
Outside genus



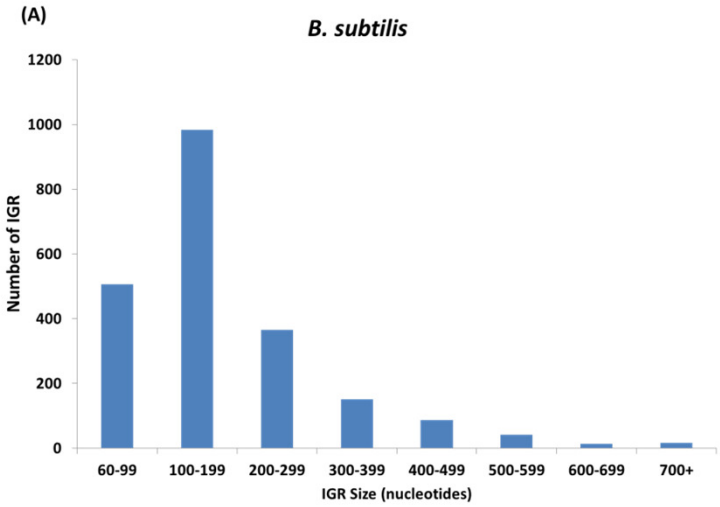
S. pyogene

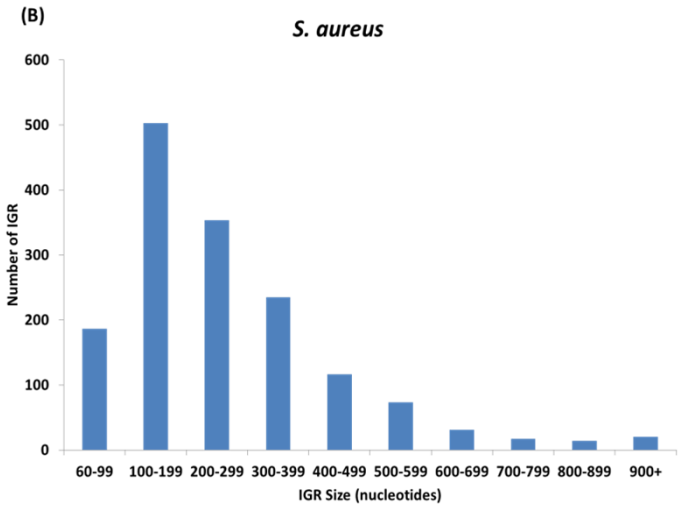


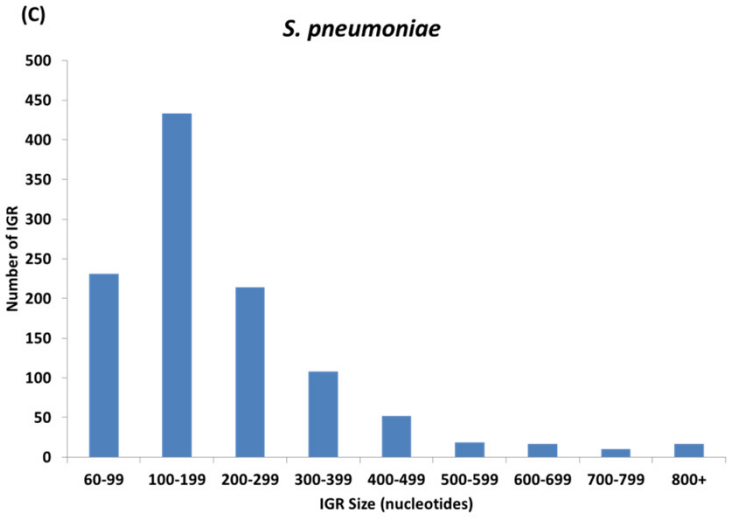
Supplementary Figure 1. Conservation distribution and patterns in other ten species. The conservation level is the number of within-genus or outside genus organisms found to have homology of the intergenic region. The intergenic region would be marked as “non-conserved” if its conservation level is less than the extended intergenic region, or “equally” and “higher” if the conservation level is equal or higher than the extended intergenic region. The smaller pie charts of “within-genus” show how conservation levels are distributed in the “higher-conserved” intergenic regions, and the total numbers of “within-genus” organisms are showed above.

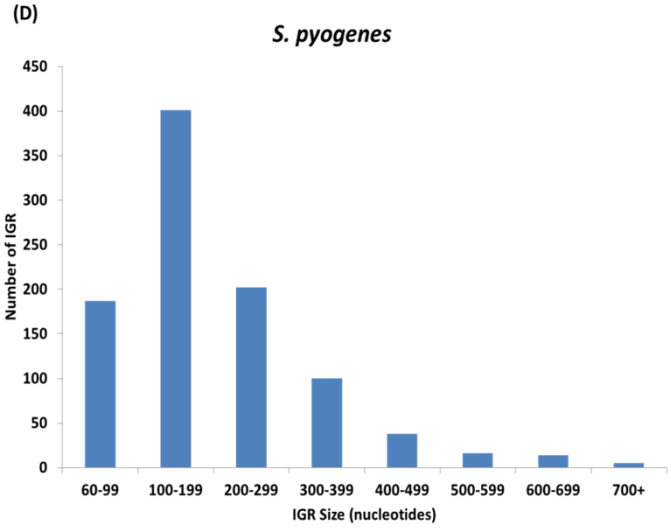


Supplementary Figure 2. sRNAs coding region enrichments in intergenic region with different conservation level for outside genus species. The chart above presents the enrichment of sRNAs in intergenic regions conserved "outside genus." The percentage is defined as the number of sRNA coding intergenic regions relative to all selected intergenic regions. For this figure, a conserved intergenic region refers to any intergenic region that has a conservation level greater than 0 for "outside genus." The enrichment of sRNAs in intergenic regions conserved "outside genus" was compared to the enrichment in all intergenic regions. The star (*) denotes: statistically significant enrichment of sRNA compared to non-conserved regions by Fisher Exact Test.

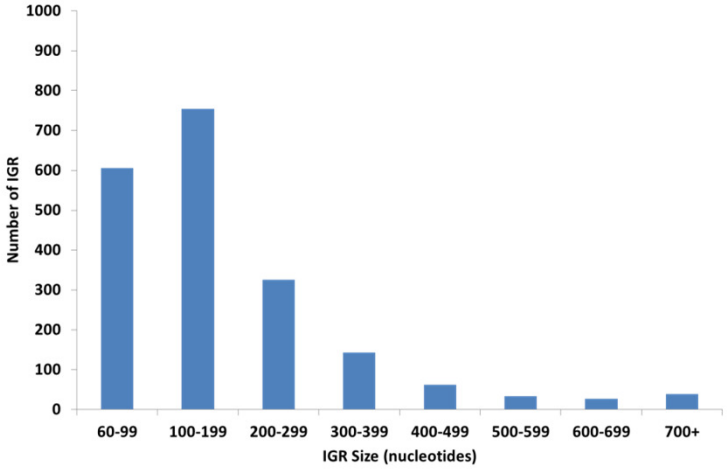

(A)
B. subtilis
Number of IGR
1200
1000
800
600
400
200
0
60-99
100-199
200-299
300-399
400-499
500-599
600-699
700+
IGR Size (nucleotides)


(B)
S. aureus
Number of IGR
600
500
400
300
200
100
0
60-99
100-199
200-299
300-399
400-499
500-599
600-699
700-799
800-899
900+
IGR Size (nucleotides)

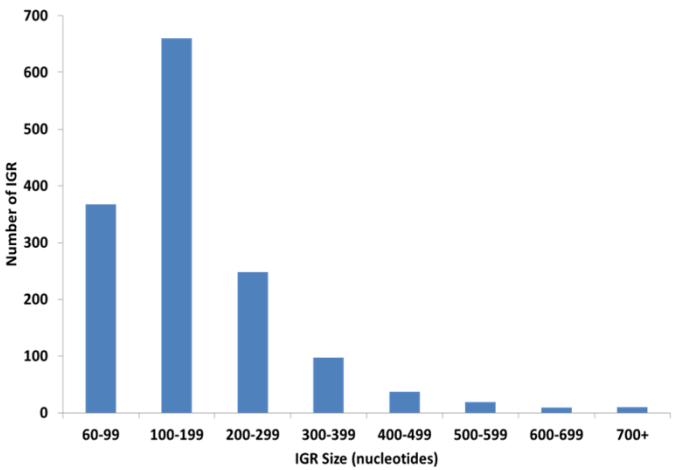

(C)
S. pneumoniae
Number of IGR
500
450
400
350
300
250
200
150
100
50
0
60-99
100-199
200-299
300-399
400-499
500-599
600-699
700-799
800+
IGR Size (nucleotides)


(D)
S. pyogenes
Number of IGR
450
400
350
300
250
200
150
100
50
0
60-99
100-199
200-299
300-399
400-499
500-599
600-699
700+
IGR Size (nucleotides)

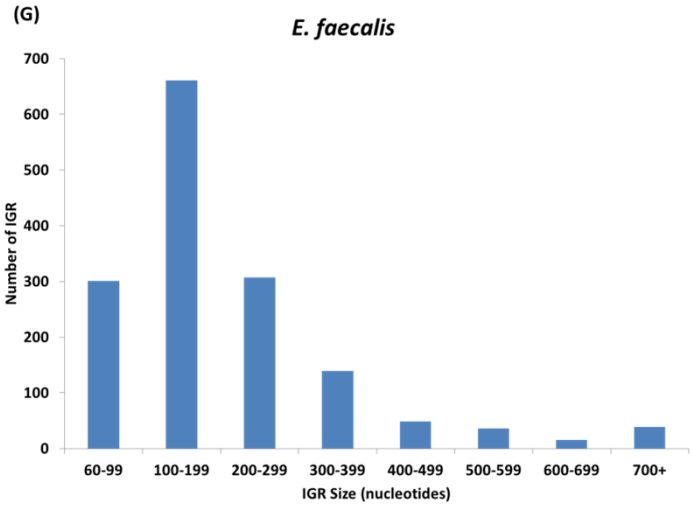
(E)


M. bovis
Number of IGR
1000
900
800
700
600
500
400
300
200
100
0
60-99
100-199
200-299
300-399
400-499
500-599
600-699
700+
IGR Size (nucleotides)

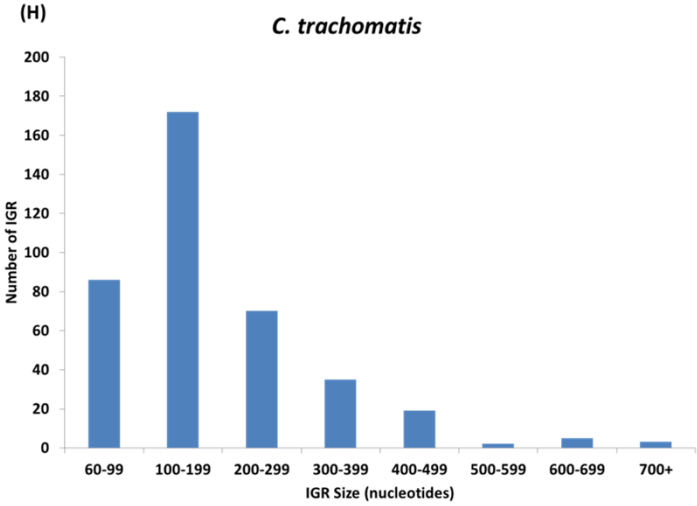
(F)


L. monocytogenes
Number of IGR
700
600
500
400
300
200
100
0
60-99
100-199
200-299
300-399
400-499
500-599
600-699
700+
IGR Size (nucleotides)

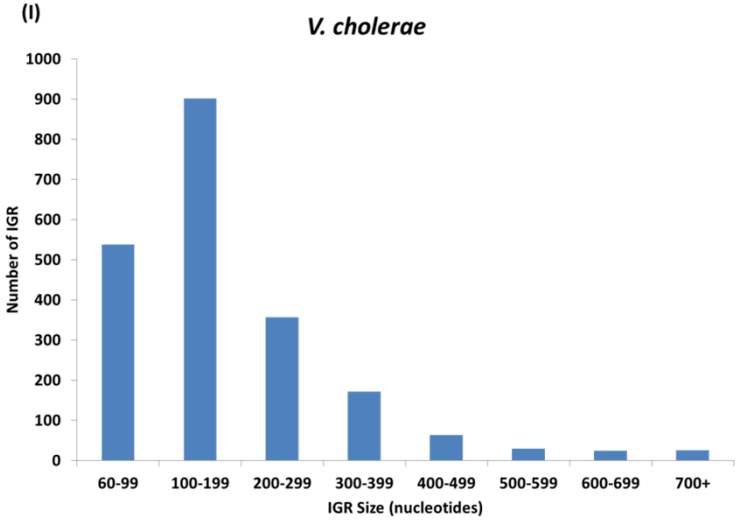
(G)

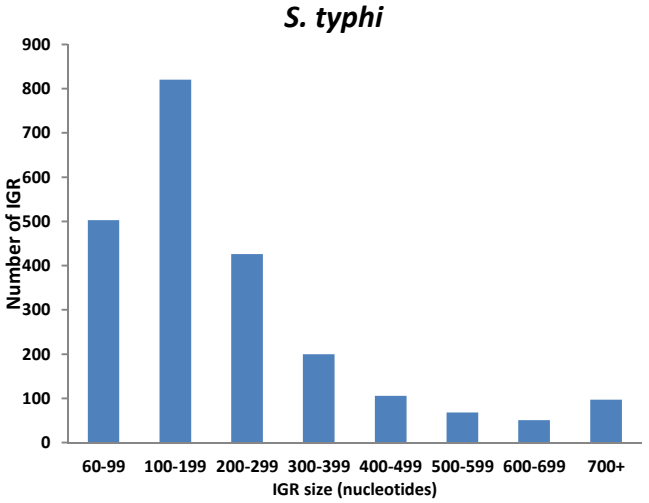

E. faecalis
Number of IGR
700
600
500
400
300
200
100
0
60-99
100-199
200-299
300-399
400-499
500-599
600-699
700+
IGR Size (nucleotides)

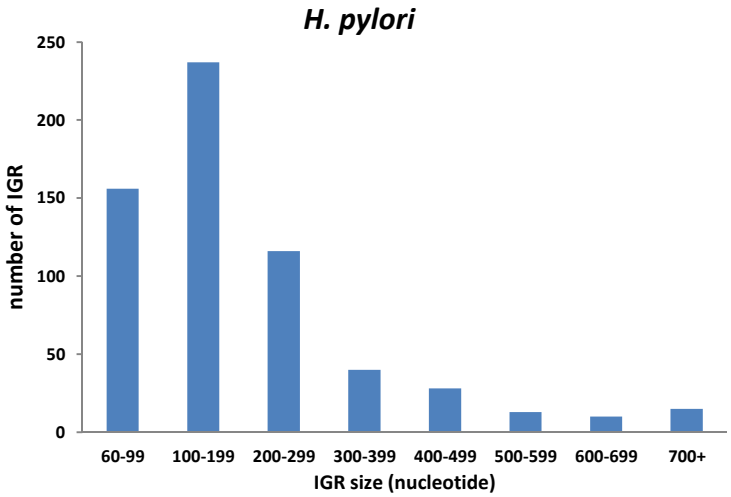
(H)

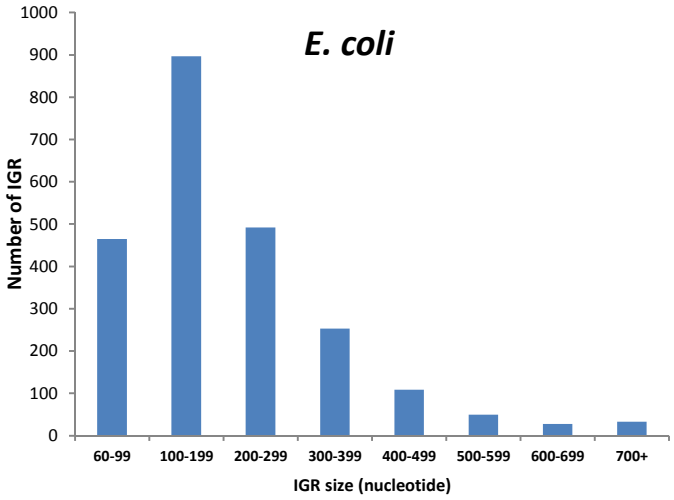

C. trachomatis
Number of IGR
200
180
160
140
120
100
80
60
40
20
0
60-99
100-199
200-299
300-399
400-499
500-599
600-699
700+
IGR Size (nucleotides)

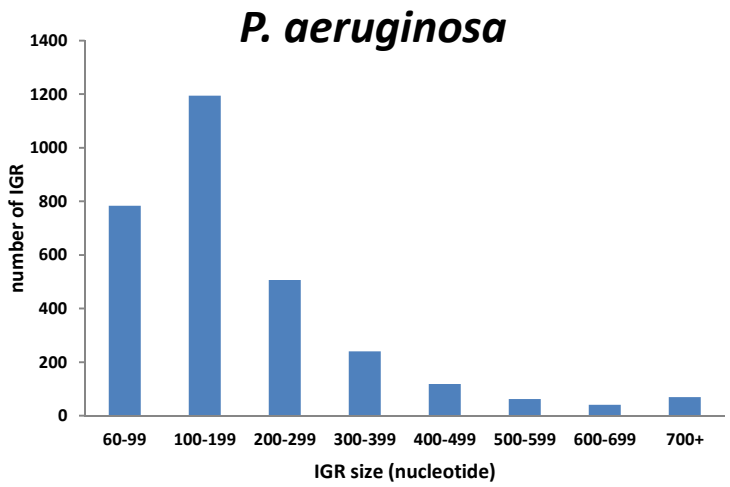
(I)


V. cholerae
Number of IGR
1000
900
800
700
600
500
400
300
200
100
0
60-99
100-199
200-299
300-399
400-499
500-599
600-699
700+
IGR Size (nucleotides)


S. typhi
Number of IGR
900
800
700
600
500
400
300
200
100
0
60-99
100-199
200-299
300-399
400-499
500-599
600-699
700+
IGR size (nucleotides)


H. pylori
number of IGR
250
200
150
100
50
0
60-99
100-199
200-299
300-399
400-499
500-599
600-699
700+
IGR size (nucleotide)


E. coli
Number of IGR
1000
900
800
700
600
500
400
300
200
100
0
60-99
100-199
200-299
300-399
400-499
500-599
600-699
700+
IGR size (nucleotide)



Supplementary Figure 3. The distribution of the size of intergenic regions in analyzed species. Intergenic regions with length shorter than 60 nucleotides were not included in this figure.

Supplementary Table 1: Species list and characteristics

Species	Gram stain	Pathogenicity	References	NCBI accession code
V. cholerae	Negative	cholera	(39–42)	NC_002505.1
L. monocytogenes	Positive	listeriosis	(43–45)	NC_003210.1
C. trachomatis	Negative	chlamydia	(46)	NC_010280.2
S. aureus	Positive	boil or food poisoning	(47–51)	NC_002745.2
B. subtilis	Positive	None	(52, 53)	NC_000964.3
S. pneumoniae	Positive	pneumonia	(54–56)	NC_003028.3
S. pyogenes	Positive	pharyngitis	(57)	NC_007297.1
E. faecalis	Positive	endocarditis or Bacteremia	(58, 59)	NC_004668.1
M. bovis	Positive*	bovine tuberculosis	(60,61)	NC_008769.1
E. coli	Negative	None	(62–72)	NC_000913.3
H. pylori	Negative	chronic gastritis and gastric ulcers	(73)	NC_000915.1
S. typhi	Negative	Salmonellosis	(74,75,80)	NC_004631.1
P. aeruginosa	Negative	Pneumonia	(76–79)	NC_002516.2

***: acid-fast Gram-positive**

Supplementary Table 2. BLAST target species

(1) *Bacillus*	
Within genus	Outside genus
1. *Bacillus cereus* 2. *Bacillus thuringiensis* 3. *Bacillus anthracis* 4. *Bacillus mycoides* 5. *Bacillus weihenstephanensis* 6. *Bacillus cytotoxicus* 7. *Bacillus atrophaeus* 8. *Bacillus amyloliquefaciens* 9. *Bacillus licheniformis* 10. *Bacillus vallismortis* 11. *Bacillus mojavensis* 12. *Bacillus megaterium* 13. *Bacillus coagulans* 14. *Bacillus coahuilensis* 15. *Bacillus pumilus* 16. *Bacillus methanolicus* 17. *Bacillus marmarensis* 18. *Bacillus safensis* 19. *Bacillus altitudinis* 20. *Bacillus aerophilus* 21. *Bacillus siamensis* 22. *Bacillus azotoformans* 23. *Bacillus vireti* 24. *Bacillus bataviensis* 25. *Bacillus horikoshii* 26. *Bacillus aquimaris*	*Agrobacterium, Bacteroides, Bordetella, Borrelia, Brucella, Burkholderia, Chlamydia,Clostridium, Deinococcus, Desulfo, Enterobacter, Enterococcus, Escherichia, Geobacter, Haemophilus, Helicobacter, Lactobacillus, Listeria Mycobacterium, Mycoplasma, Neisseria, Pseudomonas, Rhizobium, Rhodobacter, Rhodococcous, Rickettsia, Salmonella, Shigella, Streptococcus, Streptomyces, Staphylococcus, Synechococcus, Thermotoga, Vibrio, Xanthomonas, Yersinia, and Zymomonas.*

27. *Bacillus simplex* 28. *Bacillus lentus* 29. *Bacillus smithii* 30. *Bacillus cellulosilyticus* 31. *Bacillus pseudomycoides* 32. *Bacillus pseudofirmus* 33. *Bacillus selenitireducens* 34. *Bacillus clausii* 35. *Bacillus halodurans* 36. *Bacillus psychrosaccharolyticus* 37. *Bacillus alcalophilus*	
(2) *Chlamydia*	
Within genus	Outside genus
1. *Chlamydia trachomatis* 2. *Chlamydia psittaci* 3. *Chlamydia pneumoniae* 4. *Chlamydia pecorum* 5. *Chlamydia muridarum*	*Agrobacterium, Bacillus, Bacteroides, Bordetella, Borrelia, Brucella, Burkholderia, Clostridium, Deinococcus, Desulfo, Enterobacter, Enterococcus, Escherichia, Geobacter, Haemophilus, Helicobacter, Lactobacillus, Listeria Mycobacterium, Mycoplasma, Neisseria, Pseudomonas, Rhizobium, Rhodobacter, Rhodococcous, Rickettsia, Salmonella, Shigella, Streptococcus, Streptomyces, Staphylococcus, Synechococcus, Thermotoga, Vibrio, Xanthomonas, Yersinia, and Zymomonas.*
(3) *Enterococcus*	
Within genus	Outside genus
1. *Enterococcus gallinarum* 2. *Enterococcus gilvus* 3. *Enterococcus haemoperoxidus* 4. *Enterococcus hawaiiensis* 5. *Enterococcus hermanniensis* 6. *Enterococcus hirae* 7. *Enterococcus inusitatus* 8. *Enterococcus italicus* 9. *Enterococcus lactis* 10. *Enterococcus malodoratus* 11. *Enterococcus moraviensis* 12. *Enterococcus mundtii* 13. *Enterococcus pallens* 14. *Enterococcus pernyi* 15. *Enterococcus phoeniculicola* 16. *Enterococcus plantarum* 17. *Enterococcus aquimarinus* 18. *Enterococcus asini* 19. *Enterococcus avium* 20. *Enterococcus azikeevi* 21. *Enterococcus caccae* 22. *Enterococcus camelliae*	*Agrobacterium, Bacillus, Bacteroides, Bordetella, Borrelia, Brucella, Burkholderia, Chlamydia, Clostridium, Deinococcus, Desulfo, Escherichia, Geobacter, Haemophilus, Helicobacter, Lactobacillus, Listeria Mycobacterium, Mycoplasma, Neisseria, Pseudomonas, Rhizobium, Rhodobacter, Rhodococcous, Rickettsia, Salmonella, Shigella, Streptococcus, Streptomyces, Staphylococcus, Synechococcus, Thermotoga, Vibrio, Xanthomonas, Yersinia, and Zymomonas.*

23. *Enterococcus canintestini* 24. *Enterococcus canis* 25. *Enterococcus casseliflavus* 26. *Enterococcus cecorum* 27. *Enterococcus columbae* 28. *Enterococcus devriesei* 29. *Enterococcus dispar* 30. *Enterococcus durans* 31. *Enterococcus ENA07*	
(4) *Escherichia*	
Within genus	Outside genus
1. *Escherichia albertii* 2. *Escherichia fergusonii* 3. *Escherichia faecalis* 4. *Escherichia senegalensis* 5. *Escherichia vulneris* 6. *Escherichia hermannii*	*Agrobacterium, Bacillus, Bacteroides, Bordetella, Borrelia, Brucella, Burkholderia, Chlamydia, Clostridium, Deinococcus, Desulfo, Enterococcus, Geobacter, Haemophilus, Helicobacter, Lactobacillus, Listeria Mycobacterium, Mycoplasma, Neisseria, Pseudomonas, Rhizobium, Rhodobacter, Rhodococcous, Rickettsia, Salmonella, Shigella, Streptococcus, Streptomyces, Staphylococcus, Synechococcus, Thermotoga, Vibrio, Xanthomonas, Yersinia, and Zymomonas.*
(5) Helicobacter	
Within genus	Outside genus
1. *Helicobacter acinonychis* 2. *Helicobacter anseris* 3. *Helicobacter apodemus* 4. *Helicobacter aurati* 5. *Helicobacter baculiformis* 6. *Helicobacter bilis* 7. *Helicobacter bizzozeronii* 8. *Helicobacter brantae* 9. *Helicobacter callitrichis* 10. *Helicobacter canadensis* 11. *Helicobacter canis* 12. *Helicobacter cetorum* 13. *Helicobacter cholecystus* 14. *Helicobacter cinaedi* 15. *Helicobacter cynogastricus* 16. *Helicobacter equorum* 17. *Helicobacter felis* 18. *Helicobacter fennelliae* 19. *Helicobacter ganmani* 20. *Helicobacter heilmannii* 21. *Helicobacter hepaticus* 22. *Helicobacter macacae* 23. *Helicobacter magdeburgensis* 24. *Helicobacter marmotae* 25. *Helicobacter mastomyrinus*	*Agrobacterium, Bacillus, Bacteroides, Bordetella, Borrelia, Brucella, Burkholderia, Chlamydia, Clostridium, Deinococcus, Desulfo, Enterococcus, Escherichia, Geobacter, Haemophilus, Lactobacillus, Listeria Mycobacterium, Mycoplasma, Neisseria, Pseudomonas, Rhizobium, Rhodobacter, Rhodococcous, Rickettsia, Salmonella, Shigella, Streptococcus, Streptomyces, Staphylococcus, Synechococcus, Thermotoga, Vibrio, Xanthomonas, Yersinia, and Zymomonas.*

26. *Helicobacter mesocricetorum* 27. *Helicobacter muricola* 28. *Helicobacter muridarum* 29. *Helicobacter mustelae* 30. *Helicobacter pametensis* 31. *Helicobacter peregrinus* 32. *Helicobacter pullorum* 33. *Helicobacter rappini* 34. *Helicobacter rodentium* 35. *Helicobacter salomonis* 36. *Helicobacter suis* 37. *Helicobacter suncus* 38. *Helicobacter trogontum* 39. *Helicobacter tursiopsae* 40. *Helicobacter typhlonius* 41. *Helicobacter vulpecula* 42. *Helicobacter winghamensis*	
(6) *Listeria*	
Within genus	Outside genus
1. *Listeria seeligeri* 2. *Listeria innocua* 3. *Listeria welshimeri* 4. *Listeria grayi*	*Agrobacterium, Bacillus, Bacteroides, Bordetella, Borrelia, Brucella, Burkholderia, Chlamydia, Clostridium, Deinococcus, Desulfo, Enterobacter, Escherichia, Geobacter, Haemophilus, Helicobacter, Lactobacillus, Mycobacterium, Mycoplasma, Neisseria, Pseudomonas, Rhizobium, Rhodobacter, Rhodococcous, Rickettsia, Salmonella, Shigella, Streptomyces, Synechococcus, Thermotoga, Vibrio, Xanthomonas, Yersinia, and Zymomonas.*
(7) *Mycobacterium*	
Within genus	Outside genus
1. *Mycobacteria MCS* 2. *Mycobacteria JLS* 3. *Mycobacteria KMS* 4. *Mycobacteria abscessus* 5. *Mycobacteria avium* 6. *Mycobacteria ulcerans* 7. *Mycobacteria leprae* 8. *Mycobacteria tuberculosis* 9. *Mycobacteria smegmatis*	*Agrobacterium, Bacillus, Bacteroides, Bordetella, Borrelia, Brucella, Burkholderia, Chlamydia, Clostridium, Deinococcus, Desulfo, Enterobacter, Escherichia, Geobacter, Haemophilus, Helicobacter, Lactobacillus, Listeria, Mycoplasma, Neisseria, Pseudomonas, Rhizobium, Rhodobacter, Rhodococcous, Rickettsia, Salmonella, Shigella, Streptomyces, Synechococcus, Thermotoga, Vibrio, Xanthomonas, Yersinia, and Zymomonas.*
(8) *Pseudomonas*	
Within genus	Outside genus
1. *Pseudomonas syringae* 2. *Pseudomonas savastanoi* 3. *Pseudomonas amygdali*	*Agrobacterium, Bacillus, Bacteroides, Bordetella, Borrelia, Brucella, Burkholderia, Chlamydia, Clostridium,*

4. *Pseudomonas syringae group genomosp. 3* 5. *Pseudomonas fuscovaginae* 6. *Pseudomonas avellanae* 7. *Pseudomonas viridiflava* 8. *Pseudomonas coronafaciens* 9. *Pseudomonas pseudoalcaligenes* 10. *Pseudomonas mendocina* 11. *Pseudomonas oleovorans* 12. *Pseudomonas fluorescens* 13. *Pseudomonas tolaasii* 14. *Pseudomonas mandelii* 15. *Pseudomonas synxantha* 16. *Pseudomonas putida* 17. *Pseudomonas monteilii* 18. *Pseudomonas fulva* 19. *Pseudomonas stutzeri* 20. *Pseudomonas chlororaphis* 21. *Pseudomonas fragi* 22. *Pseudomonas brassicacearum* 23. *Pseudomonas alcaliphila* 24. *Pseudomonas kilonensis* 25. *Pseudomonas extremaustralis* 26. *Pseudomonas psychrotolerans* 27. *Pseudomonas agarici* 28. *Pseudomonas gingeri* 29. *Pseudomonas entomophila*	*Deinococcus, Desulfo, Enterobacter, Escherichia, Geobacter, Haemophilus, Helicobacter, Lactobacillus, Listeria Mycobacterium, Mycoplasma, Neisseria, Pseudomonas, Rhizobium, Rhodobacter, Rhodococcous, Rickettsia, Salmonella, Shigella, Streptomyces, Synechococcus, Thermotoga, Vibrio, Xanthomonas, Yersinia, and Zymomonas.*
(9) *Salmonella*	
Within genus	Outside genus
1. *Citrobacter farmeri* 2. *Citrobacter freundii complex* 3. *Citrobacter intermedius* 4. *Citrobacter koseri* 5. *Citrobacter rodentium* 6. *Salmonella bongori* 7. *Salmonella subterranea*	*Agrobacterium, Bacillus, Bacteroides, Bordetella, Borrelia, Brucella, Burkholderia, Chlamydia, Clostridium, Deinococcus, Desulfo, Enterobacter, Enterococcus, Escherichia, Geobacter, Haemophilus, Helicobacter, Lactobacillus, Listeria Mycobacterium, Mycoplasma, Neisseria, Pseudomonas, Rhizobium, Rhodobacter, Rhodococcous, Rickettsia, Shigella, Streptococcus, Streptomyces, Synechococcus, Thermotoga, Vibrio, Xanthomonas, Yersinia, and Zymomonas.*
(10) *Staphylococcus*	
Within genus	Outside genus
1. *Staphylococcus epidermidis* 2. *Staphylococcus lugdunensis* 3. *Staphylococcus warneri* 4. *Staphylococcus hominis* 5. *Staphylococcus saprophyticus*	*Agrobacterium, Bacillus, Bacteroides, Bordetella, Borrelia, Brucella, Burkholderia, Chlamydia, Clostridium, Deinococcus, Desulfo, Enterobacter, Enterococcus, Escherichia, Geobacter,*

6. *Staphylococcus pseudintermedius* 7. *Staphylococcus simulans* 8. *Staphylococcus capitis* 9. *Staphylococcus haemolyticus* 10. *Staphylococcus massiliensis* 11. *Staphylococcus lentus* 12. *Staphylococcus vitulinus* 13. *Staphylococcus equorum* 14. *Staphylococcus intermedius* 15. *Staphylococcus delphini* 16. *Staphylococcus simiae* 17. *Staphylococcus caprae* 18. *Staphylococcus carnosus* 19. *Staphylococcus hyicus* 20. *Staphylococcus xylosus*	*Haemophilus, Helicobacter, Lactobacillus, Listeria Mycobacterium, Mycoplasma, Neisseria, Pseudomonas, Rhizobium, Rhodobacter, Rhodococcous, Rickettsia, Salmonella, Shigella, Streptococcus, Streptomyces, Synechococcus, Thermotoga, Vibrio, Xanthomonas, Yersinia, and Zymomonas.*
(11) *Streptococcus*	
Within genus	Outside genus
1. *Streptococcus agalactiae* 2. *Streptococcus pneumoniae* 3. *Streptococcus mutans* 4. *Streptococcus pyogenes* 5. *Streptococcus sobrinus* 6. *Streptococcus sanguinis* 7. *Streptococcus suis* 8. *Streptococcus mitis* 9. *Streptococcus thermophiles* 10. *Streptococcus oralis* 11. *Streptococcus dysgalactiae* 12. *Streptococcus equi* 13. *Streptococcus anginosus* 14. *Streptococcus intermedius* 15. *Streptococcus constellatus* 16. *Streptococcus parasanguinis* 17. *Streptococcus salivarius* 18. *Streptococcus infantis* 19. *Streptococcus gallolyticus* 20. *Streptococcus pseudopneumoniae* 21. *Streptococcus vestibularis* 22. *Streptococcus parauberis* 23. *Streptococcus pseudoporcinus* 24. *Streptococcus urinalis* 25. *Streptococcus downei* 26. *Streptococcus equinus* 27. *Streptococcus infantarius* 28. *Streptococcus macedonicus* 29. *Streptococcus lutetiensis* 30. *Streptococcus ratti*	*Agrobacterium, Bacillus, Bacteroides, Bordetella, Borrelia, Brucella, Burkholderia, Chlamydia, Clostridium, Deinococcus, Desulfo, Enterobacter, Enterococcus, Escherichia, Geobacter, Haemophilus, Helicobacter, Lactobacillus, Listeria Mycobacterium, Mycoplasma, Neisseria, Pseudomonas, Rhizobium, Rhodobacter, Rhodococcous, Rickettsia, Salmonella, Shigella, Streptomyces, Synechococcus, Thermotoga, Vibrio, Xanthomonas, Yersinia, and Zymomonas.*

31. *Streptococcus canis* *32. Streptococcus pasteurianus* 33. *Streptococcus cristatus* 34. *Streptococcus australis* 35. *Streptococcus peroris* 36. *Streptococcus criceti* 37. *Streptococcus porcinus* 38. *Streptococcus ictaluri* 39. *Streptococcus macacae* 40. *Streptococcus iniae* 41. *Streptococcus uberis* 42. *Streptococcus gordonii*	
(12) *Vibrio*	
Within genus	Outside genus
1. Vibrio alginolyticus *2. Vibrio caribbenthicus* *3. Vibrio corallilyticus* *4. Vibrio furnissi* *5. Vibrio mimicus* *6. Vibrio orientalis* *7. Vibrio shilonii* *8. Vibrio harveyi* *9. Vibrio fischeri* *10. Vibrio splendidus*	*Agrobacterium, Bacillus, Bacteroides, Bordetella, Borrelia, Brucella, Burkholderia, Chlamydia, Clostridium, Deinococcus, Desulfo, Enterobacter, Escherichia, Geobacter, Haemophilus, Helicobacter, Lactobacillus, Listeria Mycobacterium, Mycoplasma, Neisseria, Pseudomonas, Rhizobium, Rhodobacter, Rhodococcous, Rickettsia, Salmonella, Shigella, Streptomyces, Synechococcus, Thermotoga, Xanthomonas, Yersinia, and Zymomonas.*

Note: **Supplementary Table 3** was placed in a separated file.

Supplementary Table 4. Conservation level comparison of sRCRs and RIGRs

(A) *B. subtilis*	Conservation level within *Bacillus*	
Intergenic Region Coordinates	sRNA-coding section of intergenic region (sRCR)	Random section of intergenic region excluding sRNA-coding section (RIGR)
1018468_1018998	3	3
1056216_1056702	3	1
1076952_1077440	3	3
1150427_1150850	1	1
1219105_1219849 (length 100)	3	3
1219105_1219849 (length 241)	8	1
1233300_1233614	8	4
1435245_1435628	3	1
1446568_1447251	2	1
1451135_1451371	2	1
1467411_1467805	2	1
1483471_1484117	5	1

1527902_1528326	5	3
1596300_1596474	5	2
1780220_1780618	1	1
1868374_1868617	3	1
1900514_1901117	1	1
1901737_1902219	1	1
1917097_1917639	1	1
1925421_1925655	3	2
204890_205409	5	1
2053929_2054599	3	1
2069029_2069262	1	1
2069561_2070244	4	3
2078626_2079214	5	1
2099790_2100147	3	1
2208528_2208855	2	1
2225615_2227297	3	3
2282485_2283136	1	1
2283651_2283858	2	1
2316110_2316446	2	1
2540824_2541051	3	1
2692851_2692933	1	1
2734143_2734953	2	1
2751726_2752167	2	1
275561_275838	2	1
2913338_2913661	2	2
3072110_3072401	1	1
3105043_3105470	4	3
3145958_3146238	2	1
3302763_3303042	1	1
3572889_3573207	5	3
3625507_3625741	2	1
3631572_3631763	1	3
3738217_3738343	1	1
3851893_3852186	3	1
3856172_3857017	6	2
3988763_3989232	4	1
3999097_3999350	11	3
4035607_4035990	2	1
4122849_4123193	2	1
4171789_4172259	1	1
4187174_4187681	4	1
474225_474731	7	3
532552_532922	2	2
554475_554669	1	1
559464_560151	12	6
663027_663601	1	1
678951_679390	2	1
694281_694662	4	2

795867_796314	2	1

(B) *S. pyogenes*	Conservation level within *Streptococcus*	
Intergenic Region Coordinates	sRNA-coding section of intergenic region (sRCR)	Random section of intergenic region excluding sRNA-coding section (RIGR)
125779_125973	1	1
195504_196059	6	3
214258_214798	6	2
257186_257517	1	1
270844_271455	1	1
277177_277431	1	1
335986_336478	1	1
358476_358935	1	1
558841_559706	1	1
638386_638734	1	1
914250_914572	6	1
961799_962205	2	3
968871_969241	1	1
1016199_1016649	1	1
1018348_1018705	2	1
1173257_1173399	3	3
1175357_1176511	1	1
1251734_1252159	8	2
1354931_1355292	1	1
1532755_1533053	1	1
1603784_1604445	23	1
1678751_1679185	3	3
1719722_1720207	1	1
1719722_1720208	3	1
1719722_1720209	3	2
1719722_1720210	1	2
1719722_1720211	7	1
1719722_1720212	1	1

Supplementary Table 6. Minimum length of long intergenic regions with different thresholds in each species
***: The average length of all intergenic regions longer than 60 base pairs.**

Species	Size of genome ($\times 10^6$ bp)	# of total intergenic region	Average length*	length of intergenic regions within top 20% long
B. subtilis	4.2	2167	188 bp	≥252 bp
C. trachomatis	1	393	195 bp	≥280 bp
E. coli	4.6	2327	215 bp	≥302 bp
E. faecalis	3.2	1547	229 bp	≥282 bp
H. pylori	1.6	615	205 bp	≥282 bp
L. monocytogenes	2.9	1447	162 bp	≥242 bp
M. bovis	4.3	1991	185 bp	≥260 bp

P. aeruginosa	6.2	3016	206 bp	≥282 bp
S. aureus	2.8	1548	270 bp	≥381 bp
S. pneumoniae	2.2	1101	235 bp	≥300 bp
S. pyogenes	1.8	963	204 bp	≥287 bp
S. typhi	4.7	2271	235 bp	≥325 bp
V. cholerae	5	2112	190 bp	≥265 bp