

**Supporting information:**

**Figure S1.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG00000006.

**Figure S2.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG00000009.

**Figure S3.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000249.

**Figure S4.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000642.

**Figure S5.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000675.

**Figure S6.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000736.

**Figure S7.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000753.

**Figure S8.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000878.

**Figure S9.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000898.

**Figure S10.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0001033.

**Figure S11.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0001616.

**Figure S12.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0002144.

**Figure S13.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0002176.

**Figure S14.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0002286.

**Figure S15.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0003280.

**Figure S16.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0003557.

**Figure S17.** Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0004686.

**Figure S18.** Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus subtilis* subsp. *subtilis* str. 168 (GCF\_000009045) genome.

**Figure S19.** Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus pseudomyoides* DSM 12442 (GCF\_000161455) genome.

**Figure S20.** Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus amyloliquefaciens* Y2 (GCF\_000262385) genome.

**Figure S21.** Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus* sp. Pc3 (GCF\_000815145) genome.

**Figure S22.** Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus velezensis* (GCF\_003073255) genome.

**Figure S23.** Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus velezensis* (GCF\_003390415) genome.

**Figure S24.** Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus amyloliquefaciens* (GCF\_008824205) genome.

**Figure S25.** Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus subtilis* (GCF\_012647565) genome.

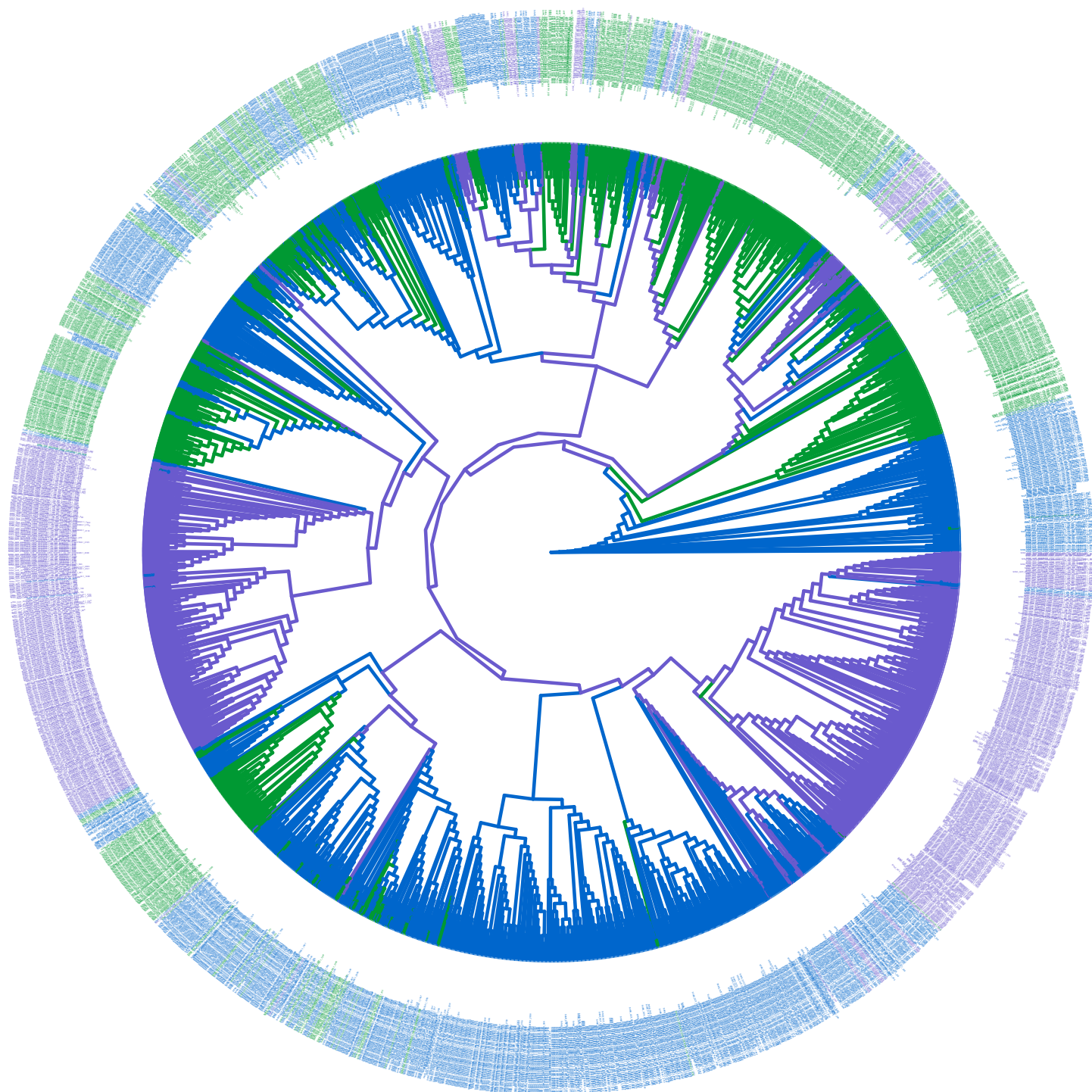
**Figure S26.** Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus velezensis* (GCF\_016904925) genome.

## Type

— *SrfAA*

— *SrfAB*

— *SrfAC*



**Figure S1. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000006.**

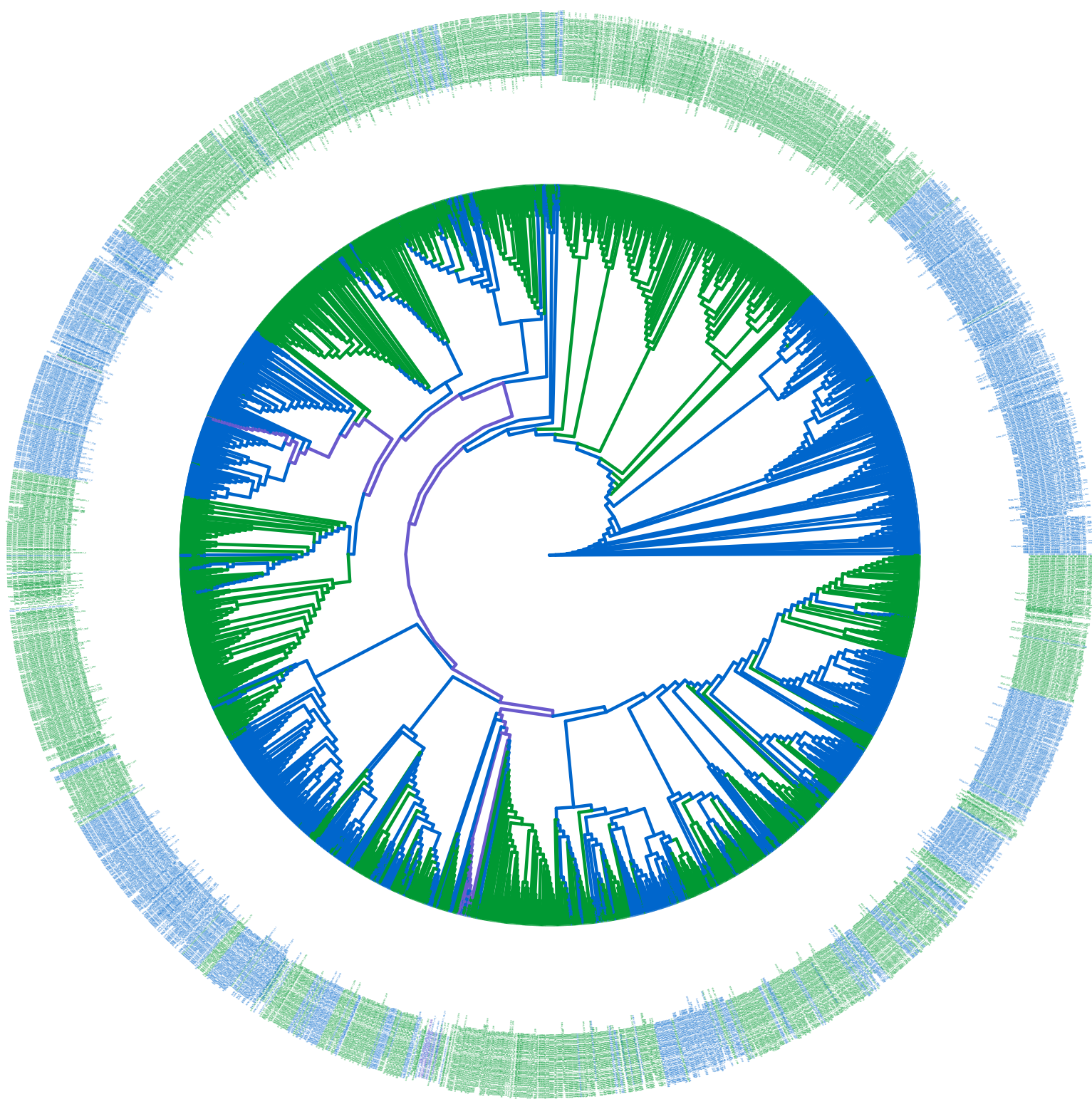


## Type

— *SrfAA*

— *SrfAB*

— *SrfAC*

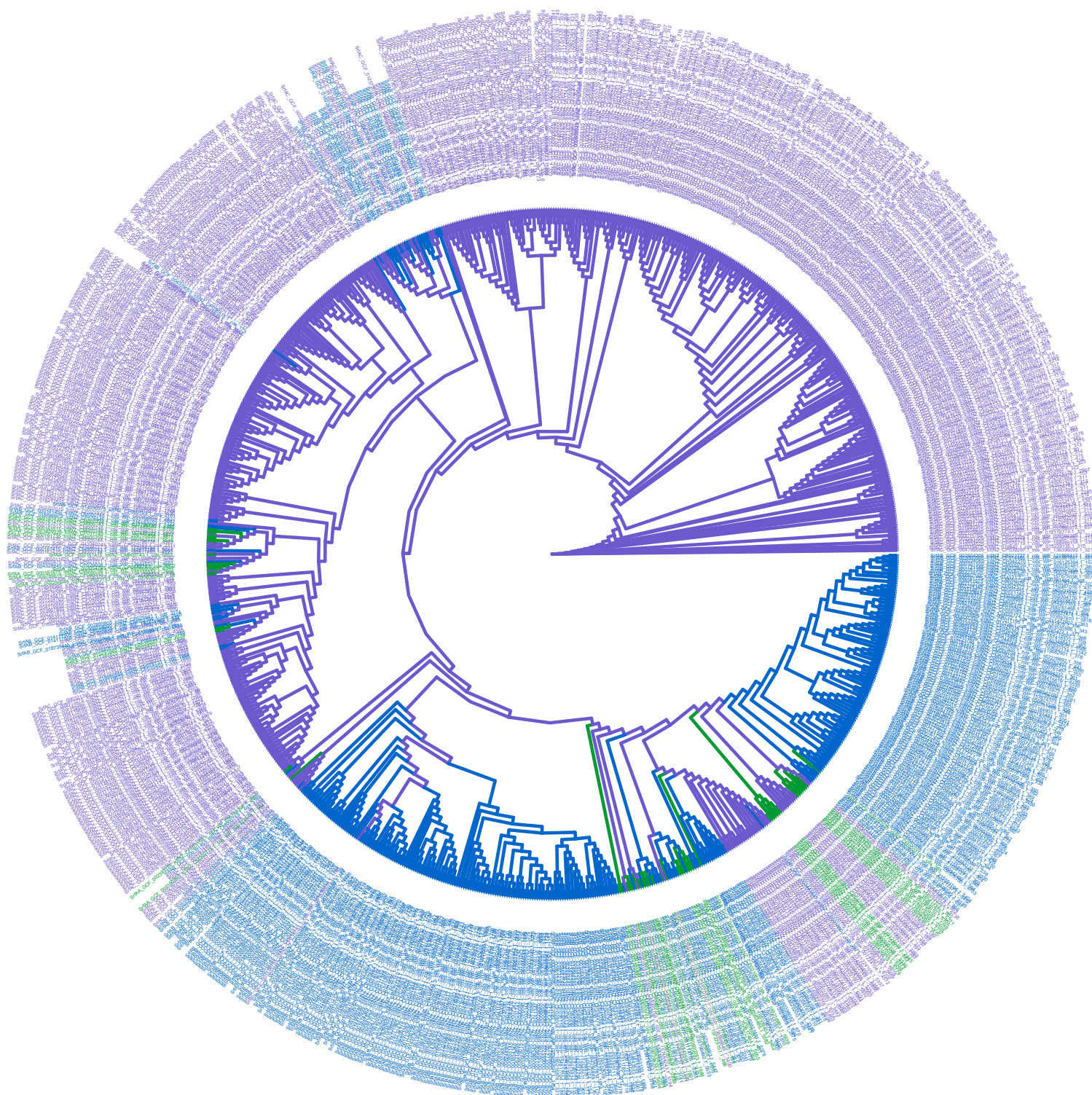


**Figure S2. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000009.**



## Type

- SrfAA*
- SrfAB*
- SrfAC*



**Figure S3. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000249.**



Type

- *SrfAA*
- *SrfAB*
- *SrfAC*

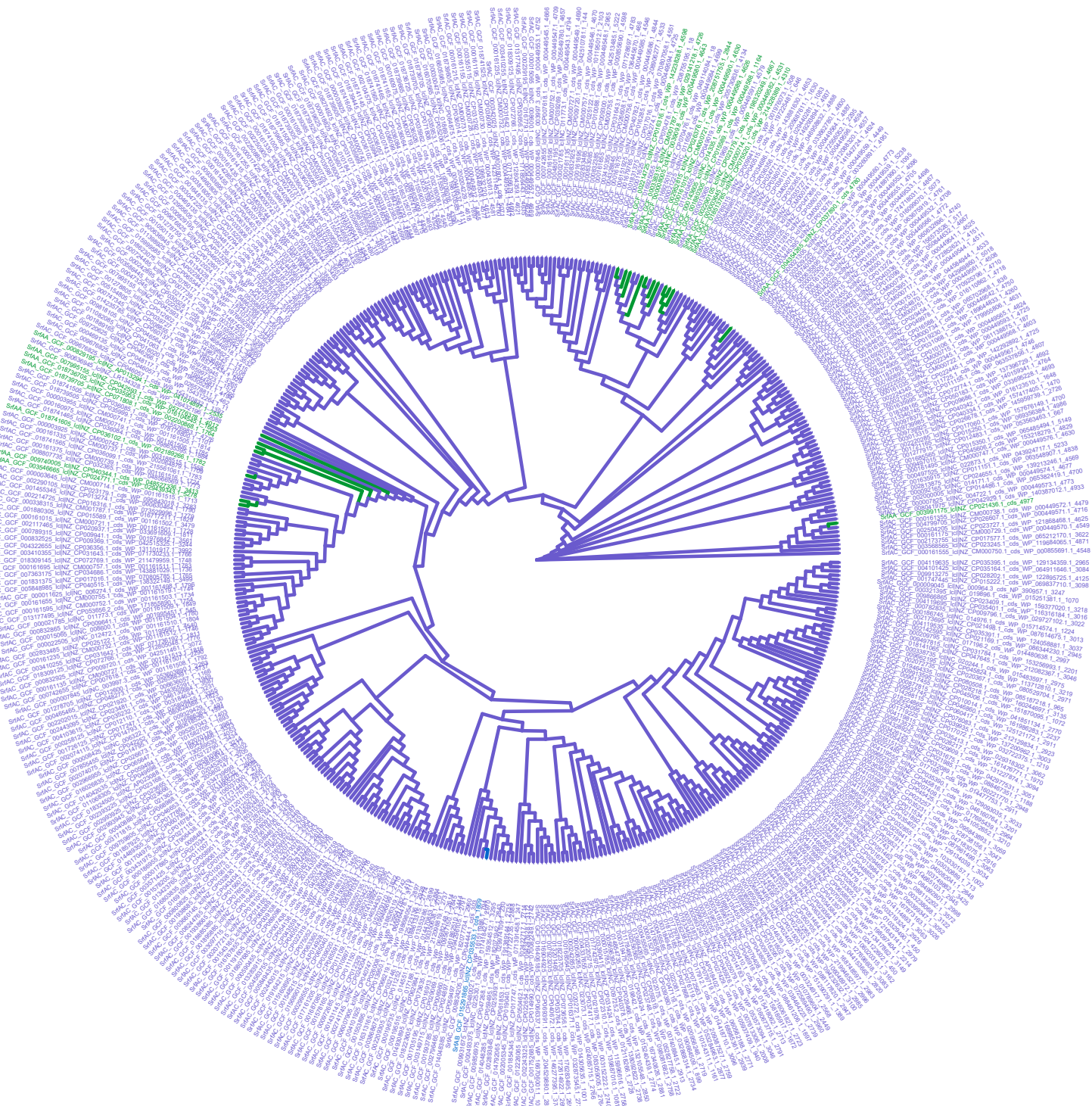


Figure S4. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000642.



Type

*SrfAA*

*SrfAB*

*SrfAC*



Figure S5. Detailed phylogenetic tree in of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000675.



Type

*SrfAA*

*SrfAB*

*SrfAC*

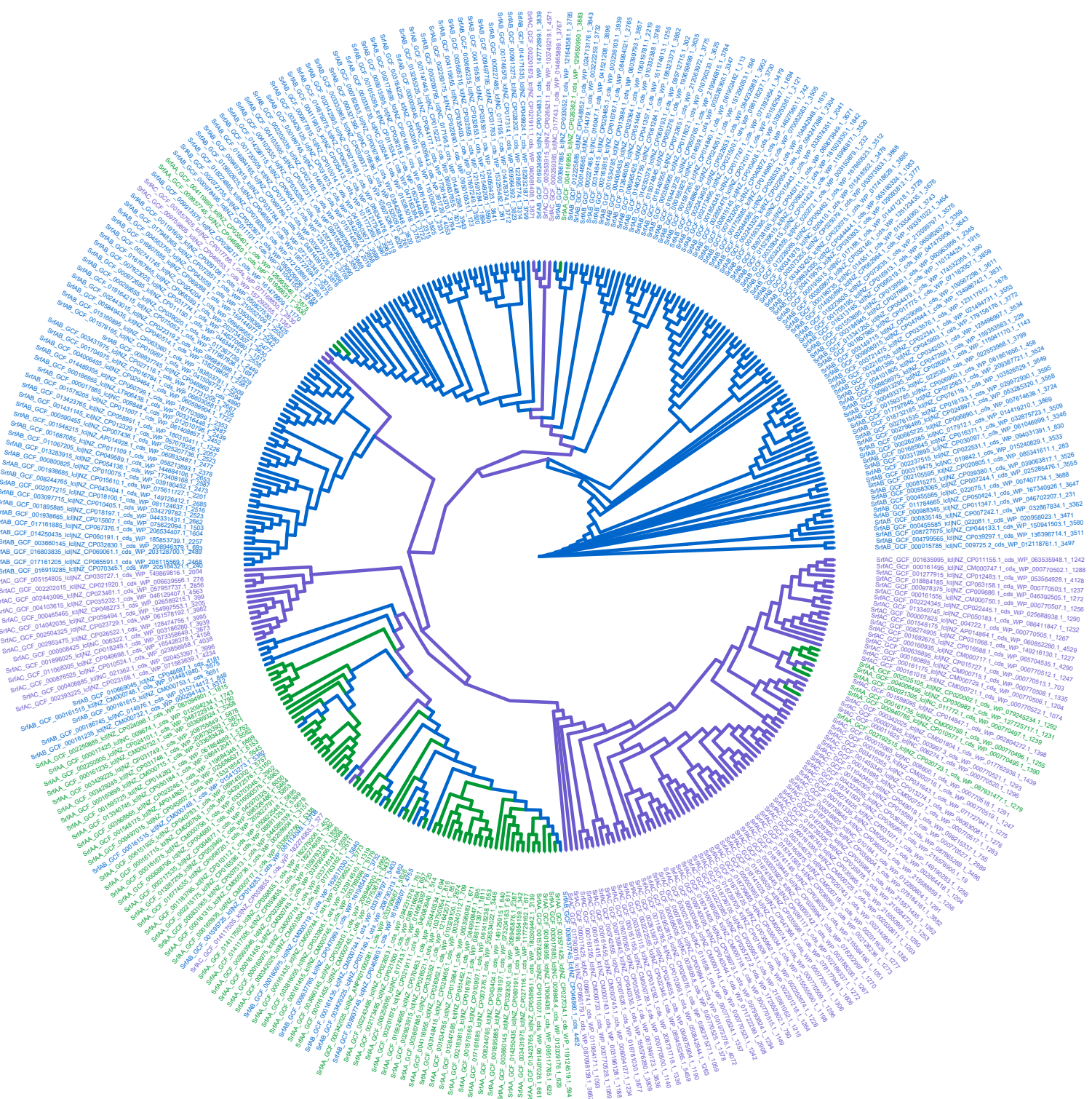


Figure S6. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000736.



Type

*SrfAA*

*SrfAB*

*SrfAC*

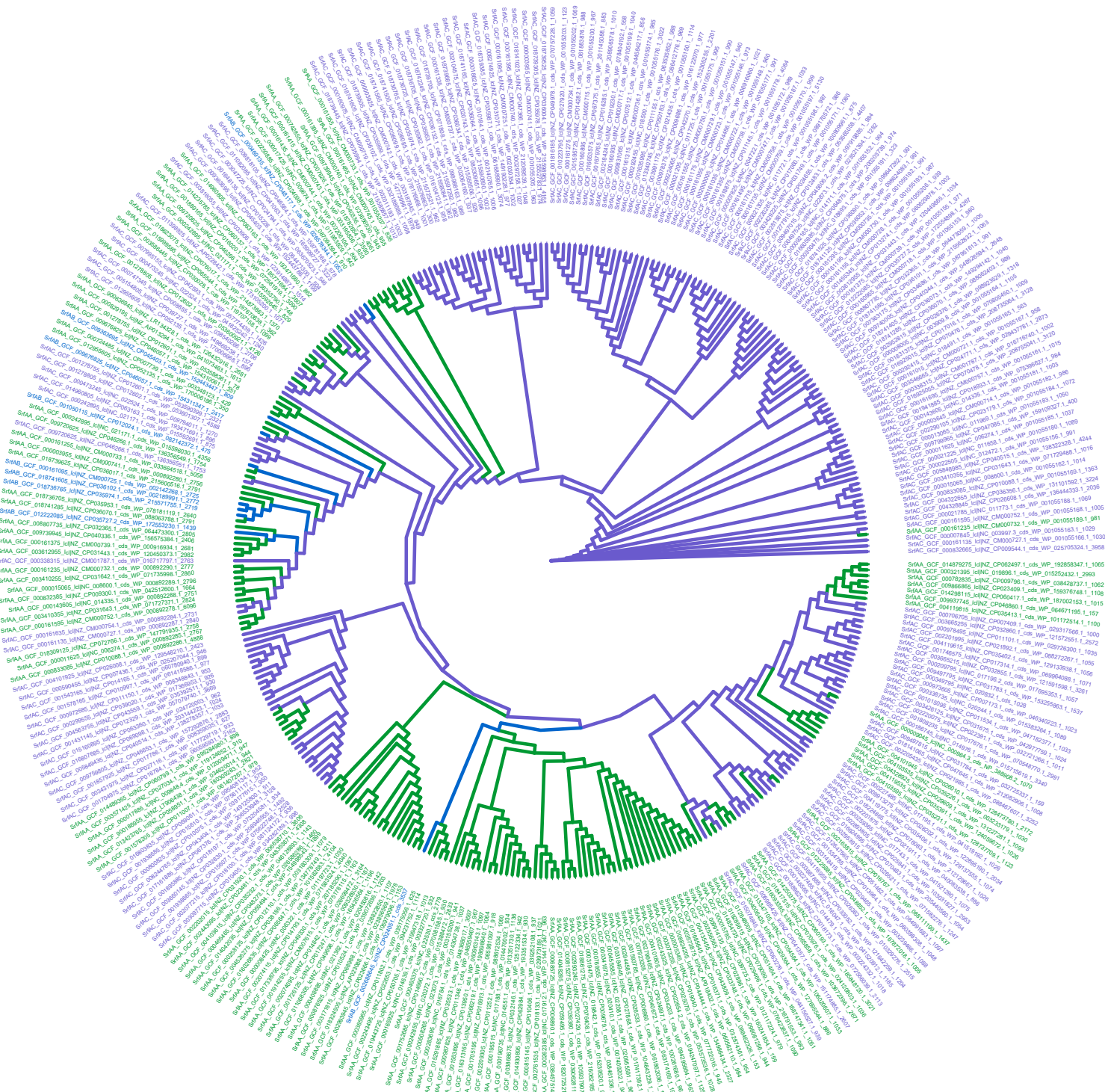


Figure S7. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000753.

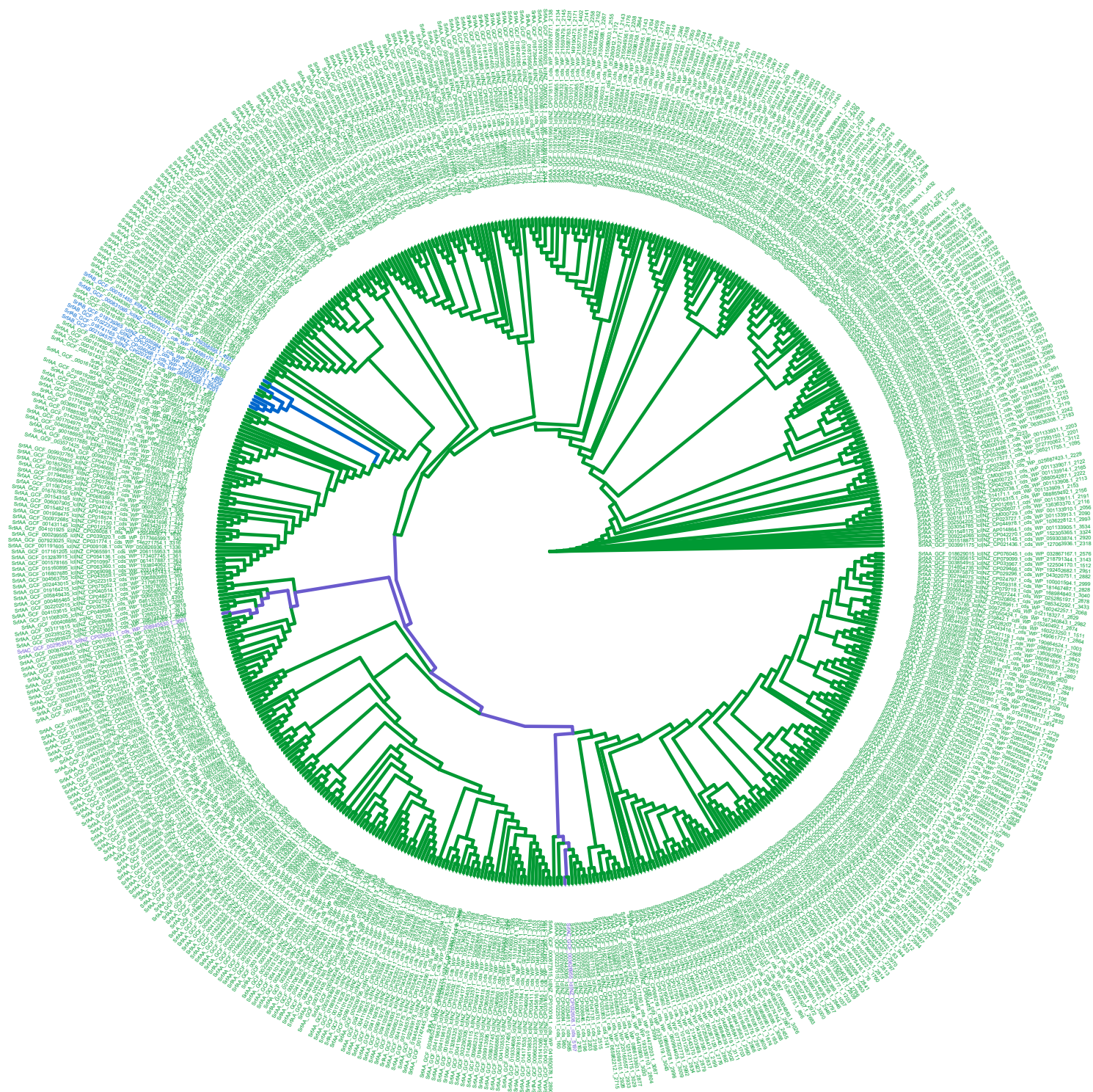


## Type

— *SrfAA*

— *SrfAB*

— *SrfAC*



**Figure S8. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000878.**



Type

*SrfAA*

*SrfAB*

*SrfAC*

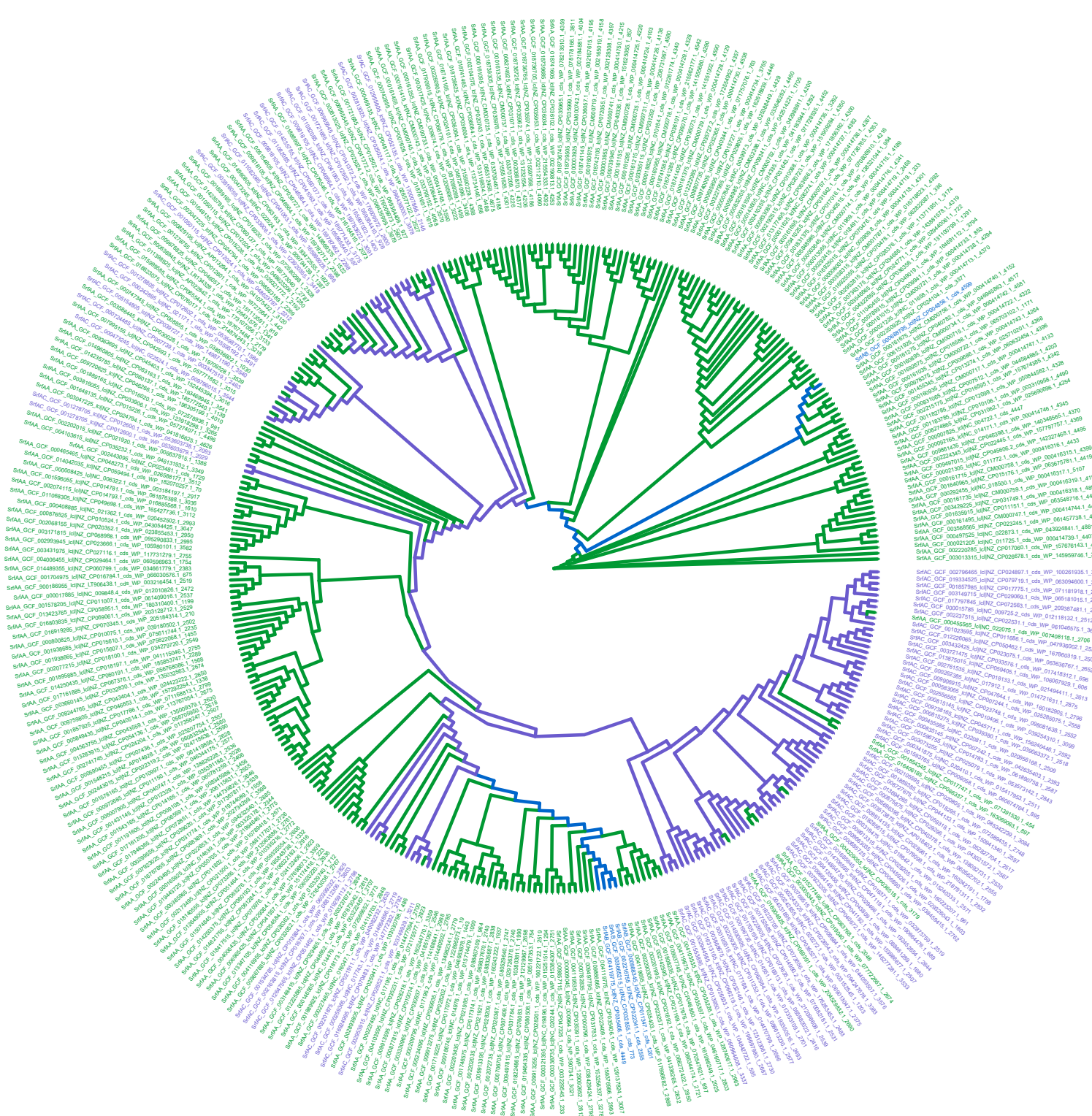


Figure S9. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0000898.



Type

*SrfAA*

*SrfAB*

*SrfAC*

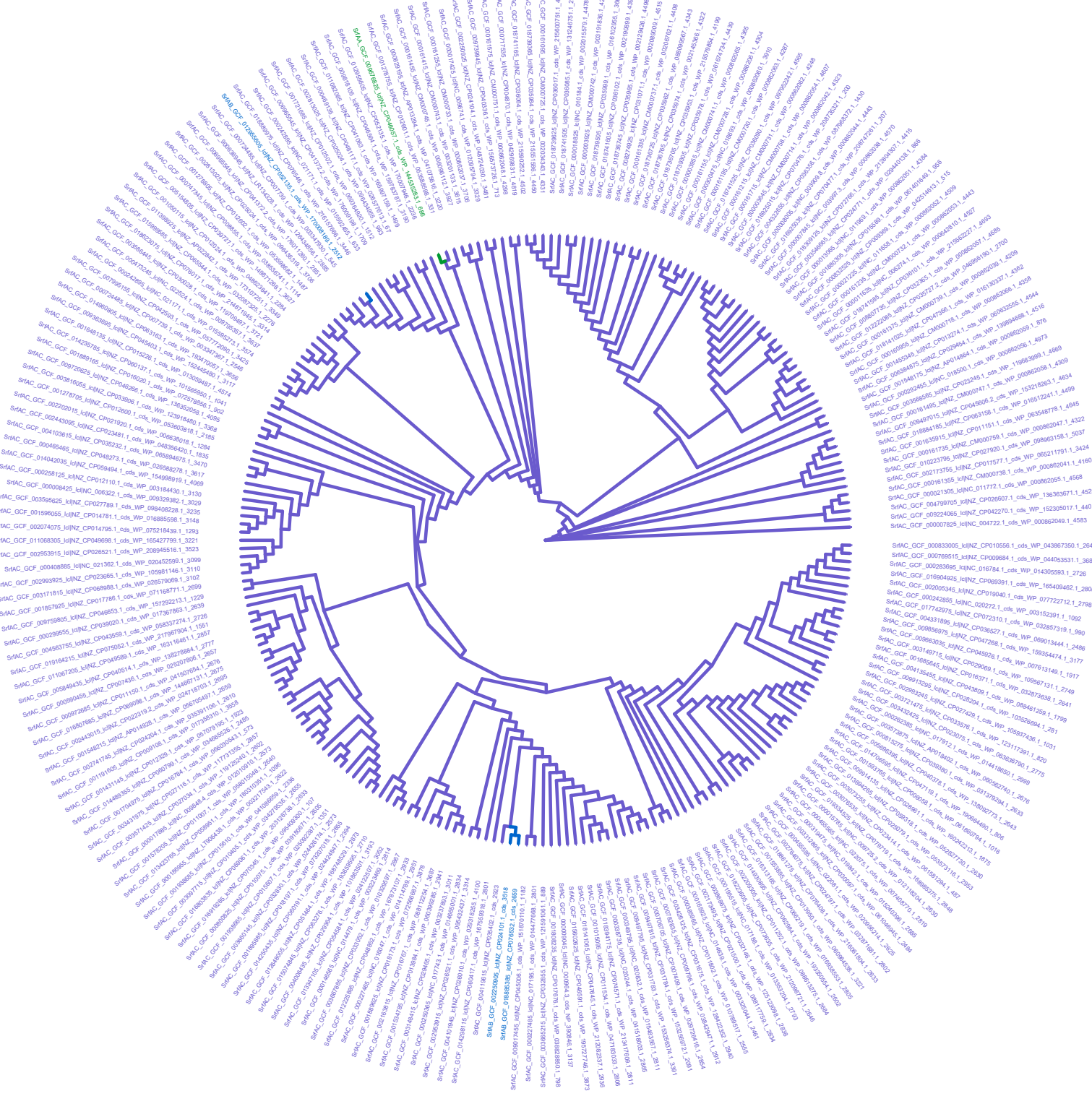
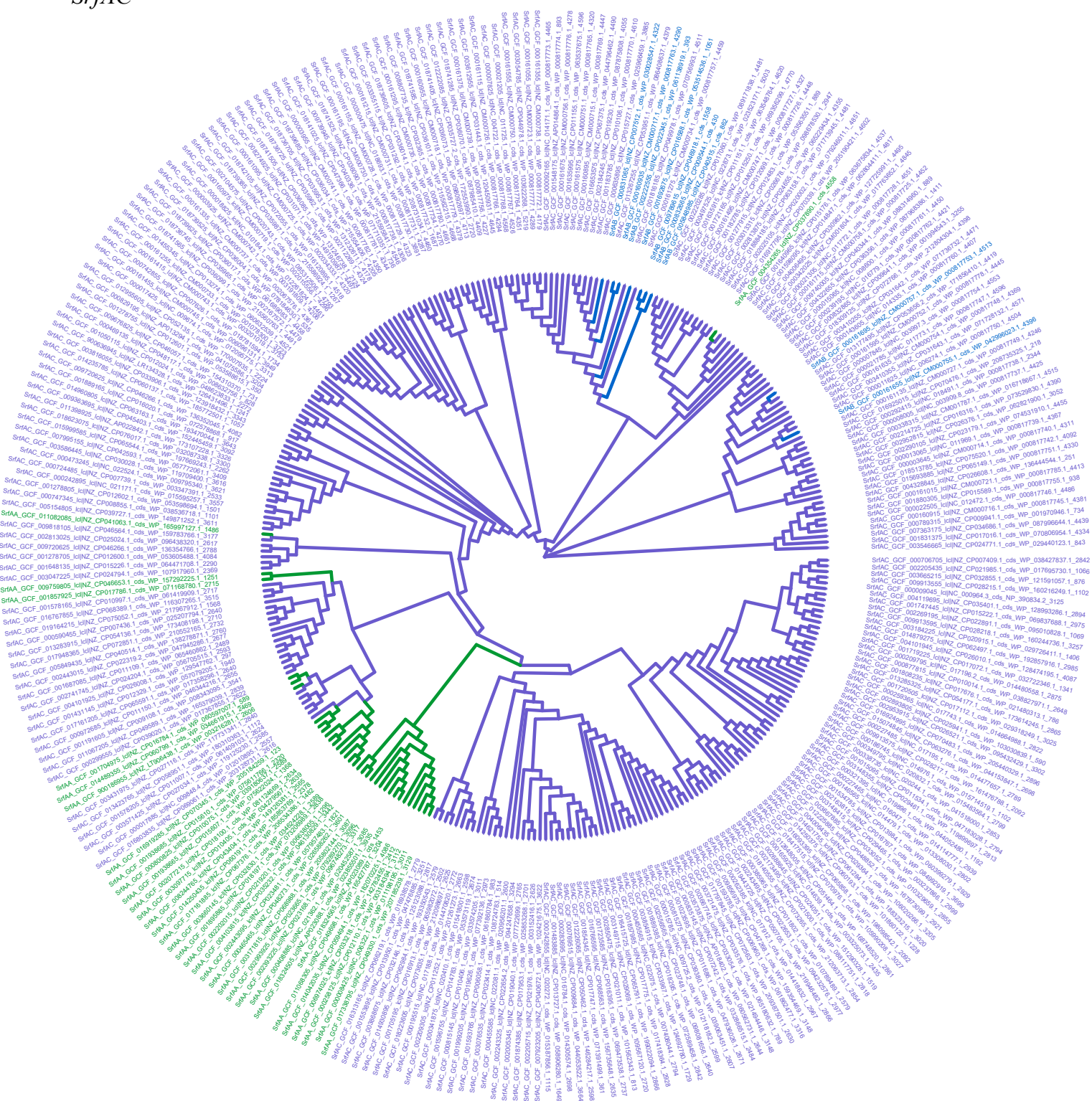


Figure S10. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0001033.

## Type

*SrfAA**SrfAB**SrfAC*

**Figure S11. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0001616.**



Type

- *SrfAA*
- *SrfAB*
- *SrfAC*

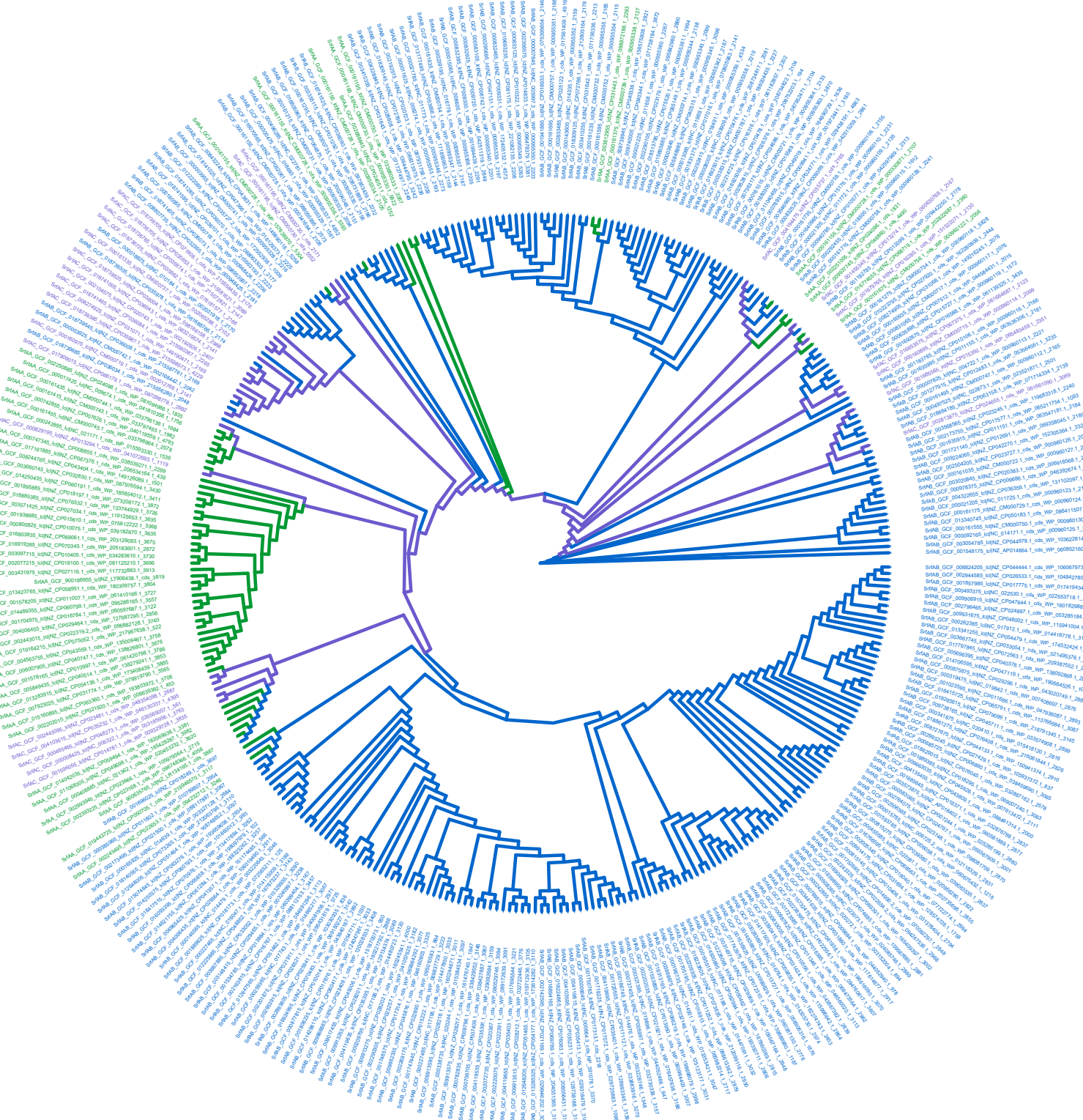


Figure S12. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0002144.

Type

- SrfAA*
- SrfAB*
- SrfAC*

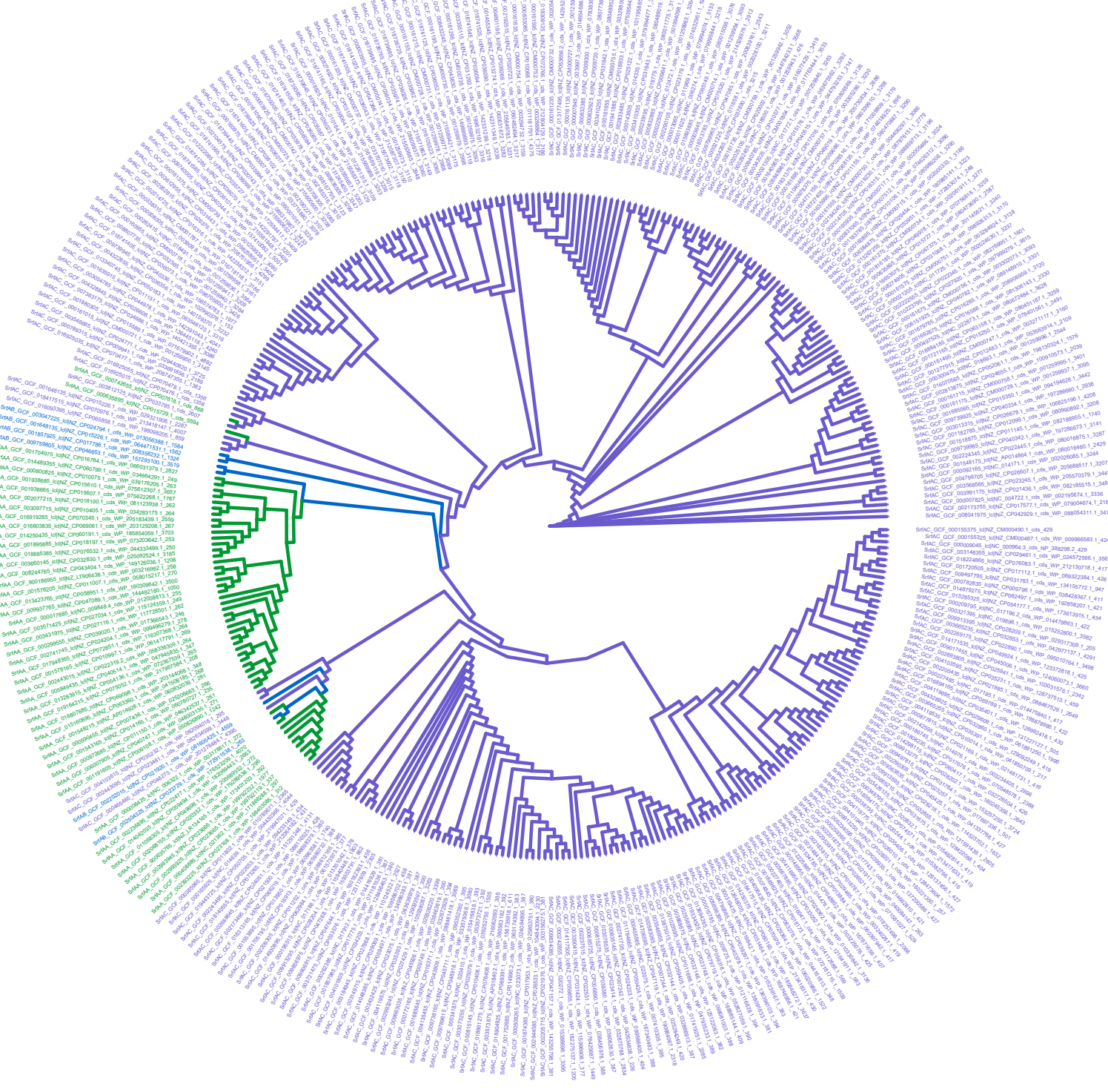


Figure S13. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0002176.



Type

- *SrfAA*
- *SrfAB*
- *SrfAC*

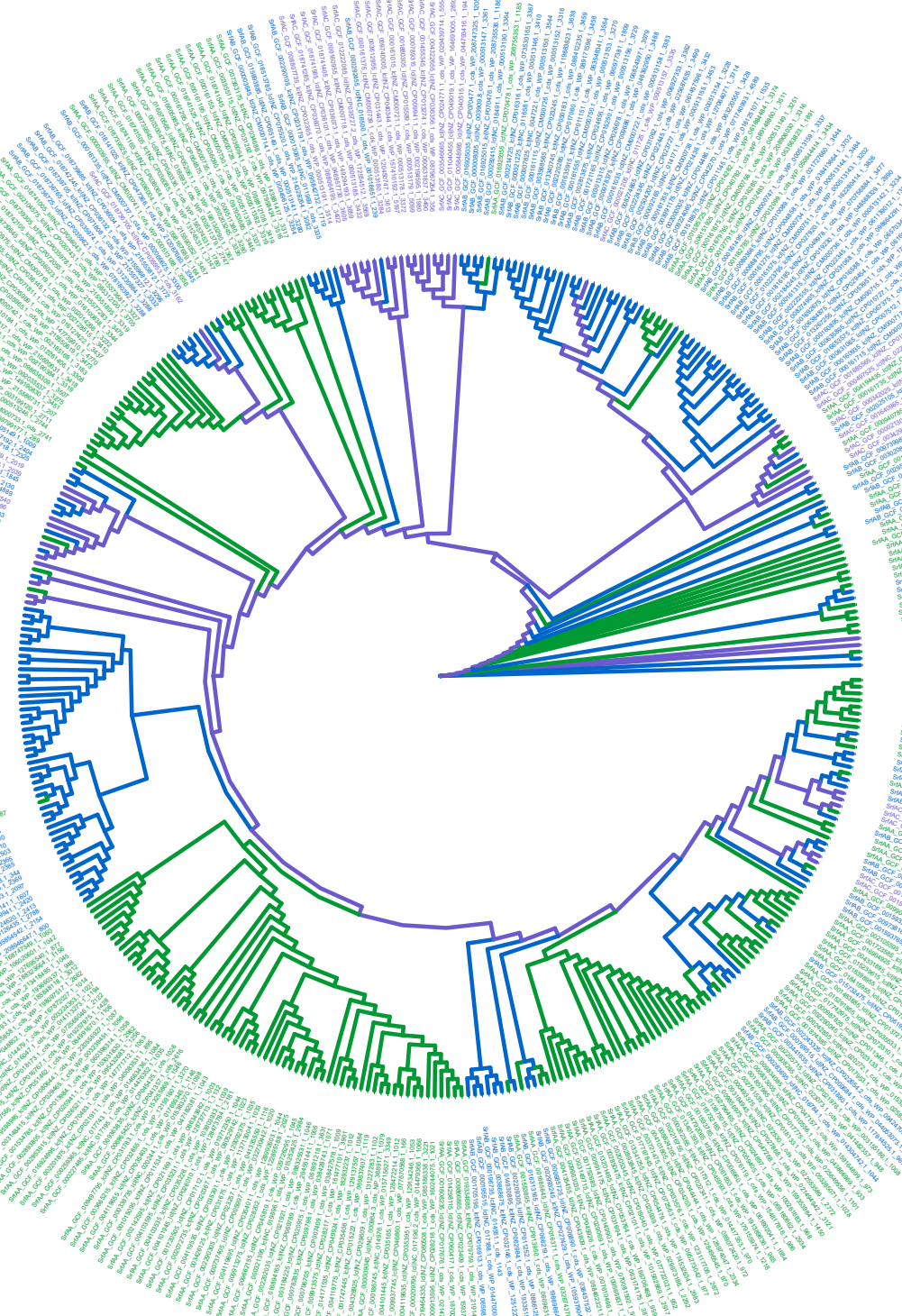


Figure S14. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0002286.

# Type

*SrfAA*

*SrfAB*

*SrfAC*

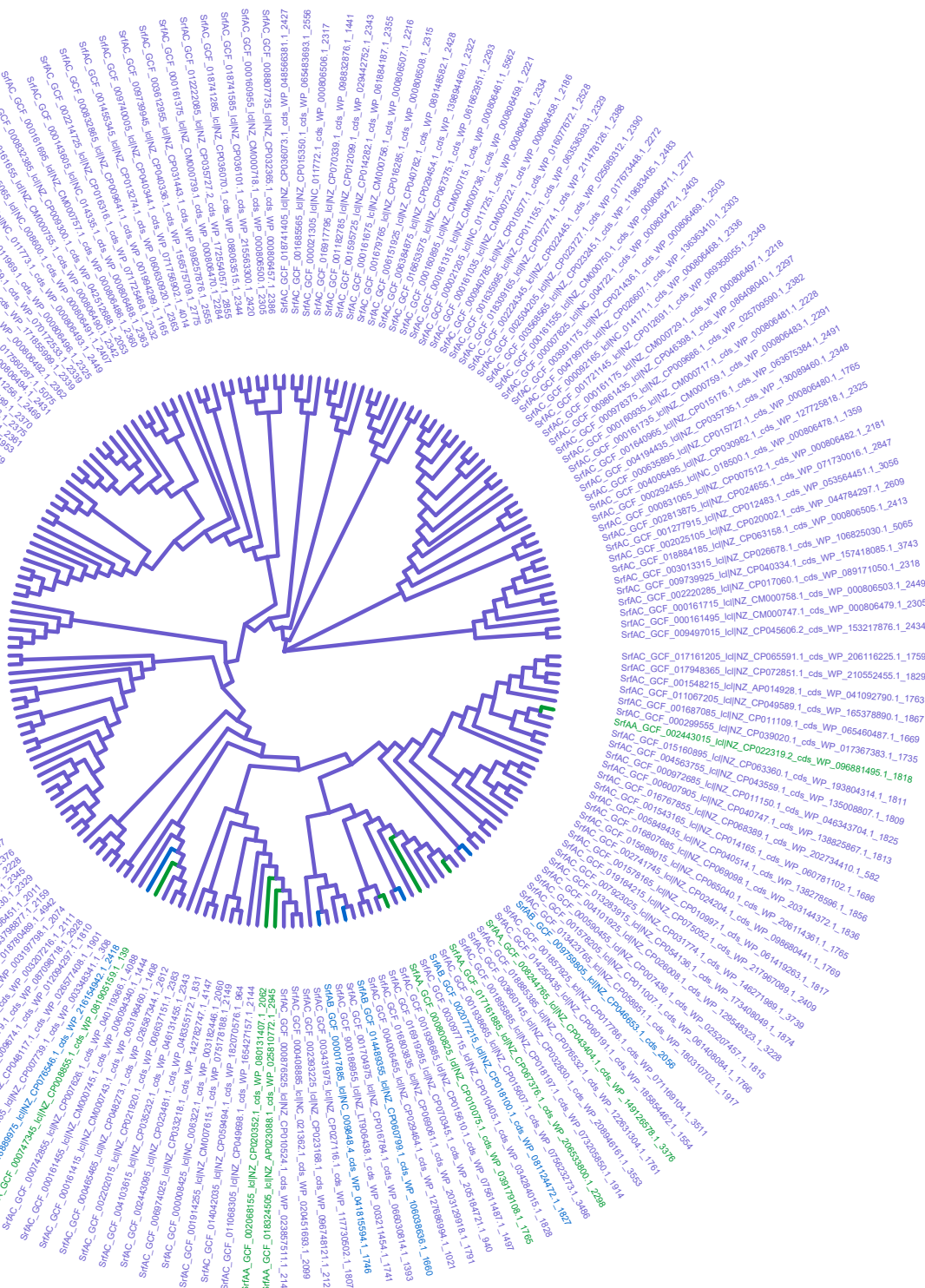


Figure S15. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0003280.

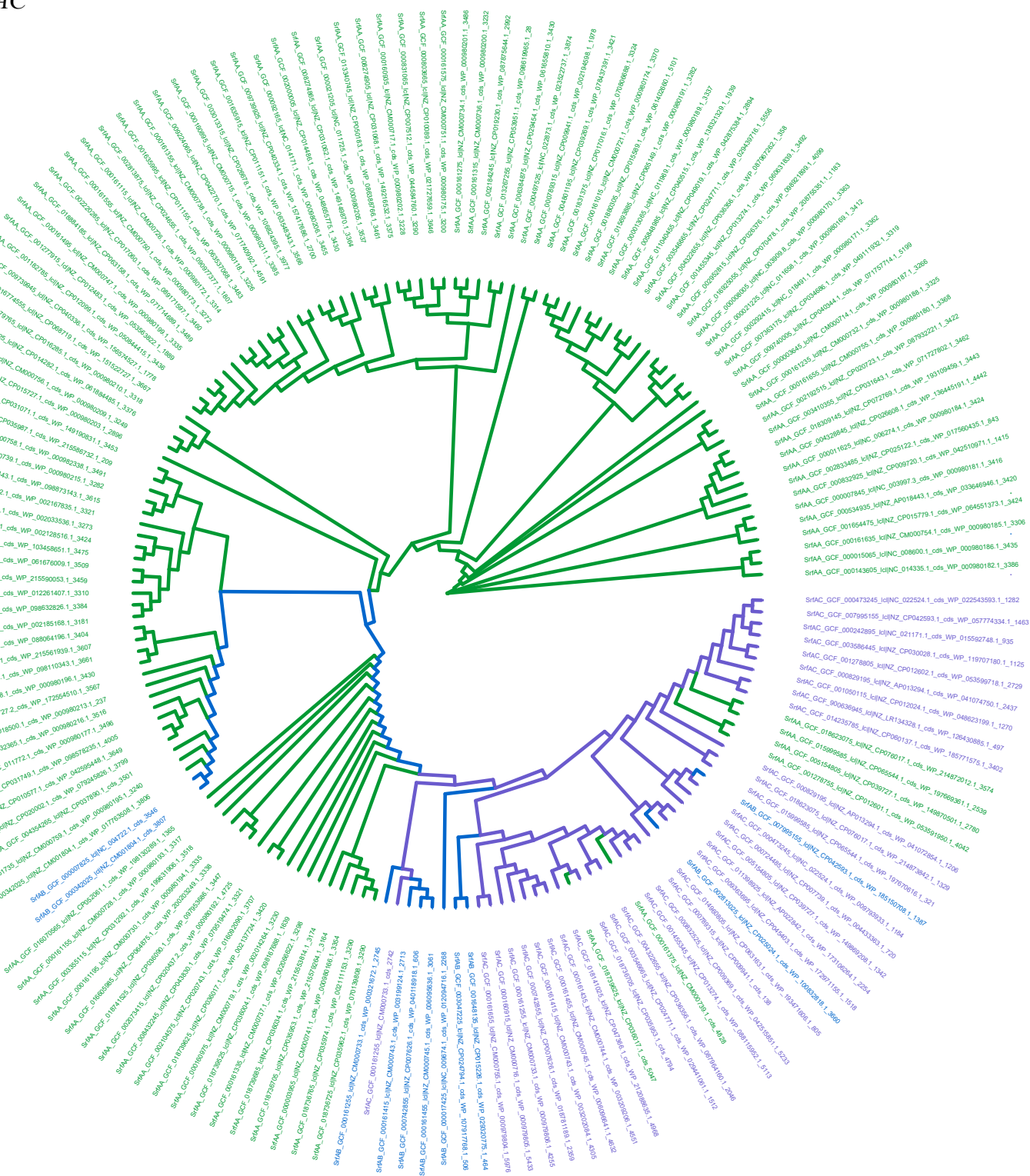


# Type

*SrfAA*

*SrfAB*

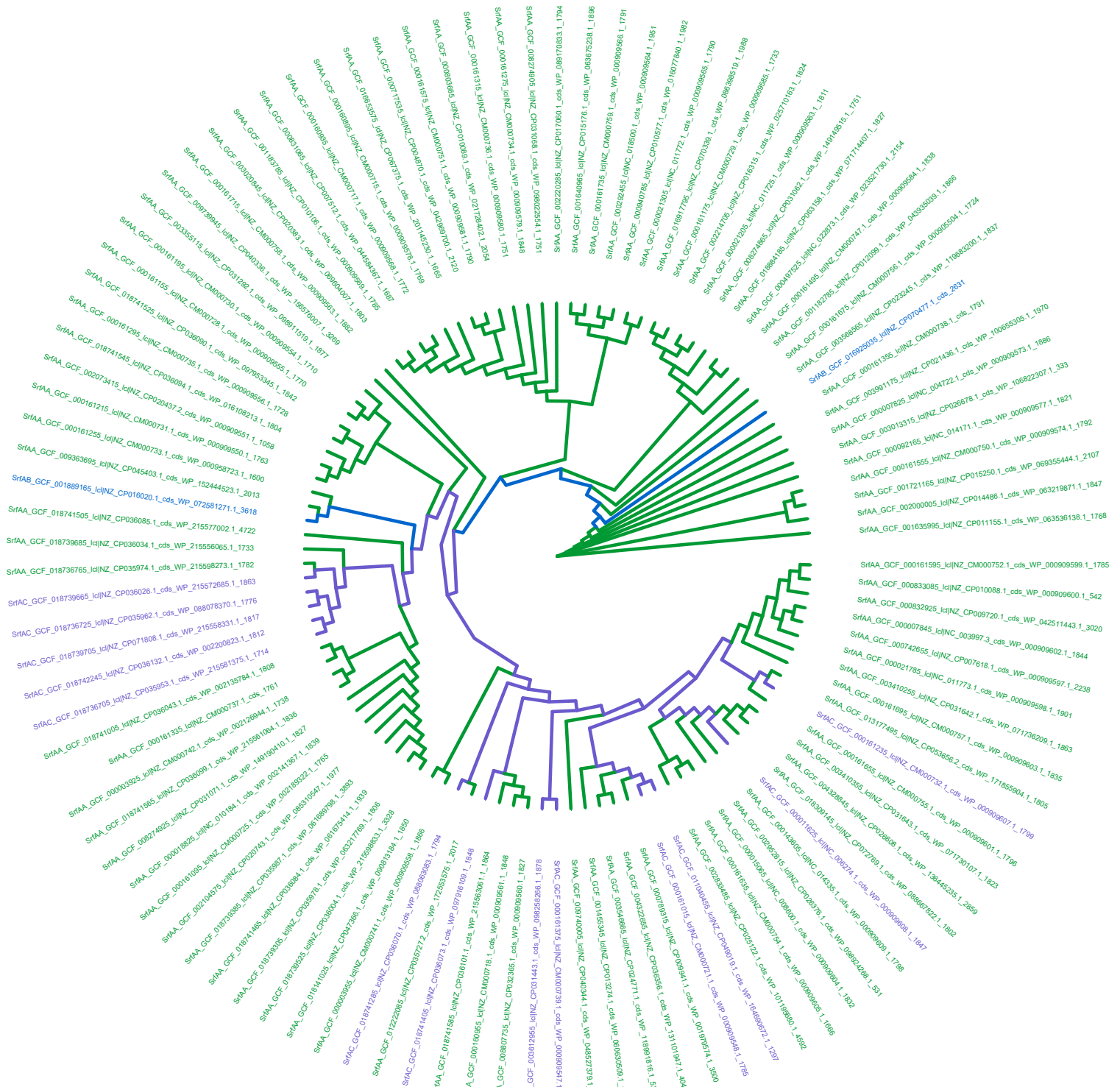
*SrfAC*



**Figure S16. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0003557.**

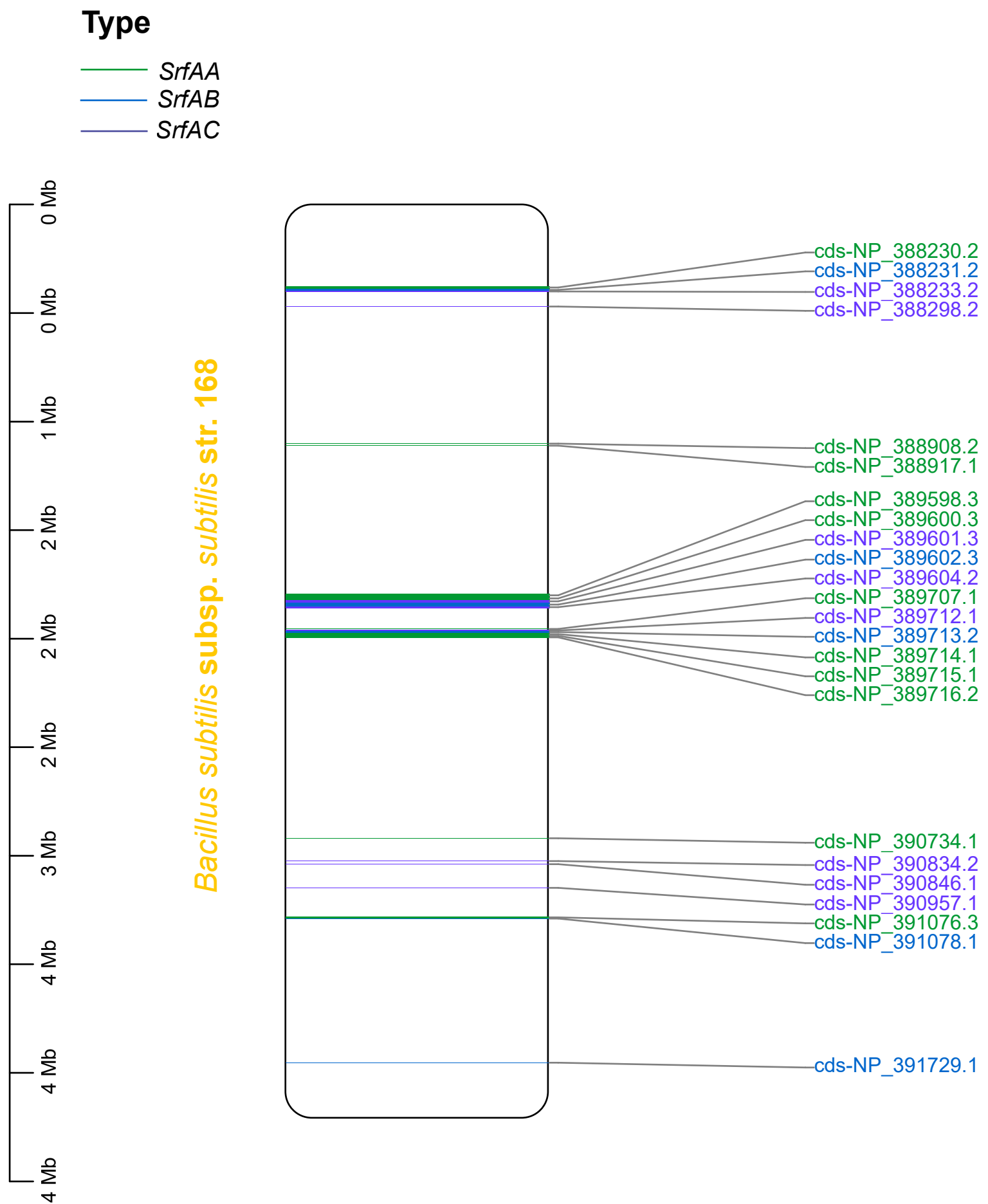
# Type

- *SrfAA*
- *SrfAB*
- *SrfAC*



**Figure S17. Detailed phylogenetic tree of *SrfAA*, *SrfAB* and *SrfAC* genes in OG0004686.**

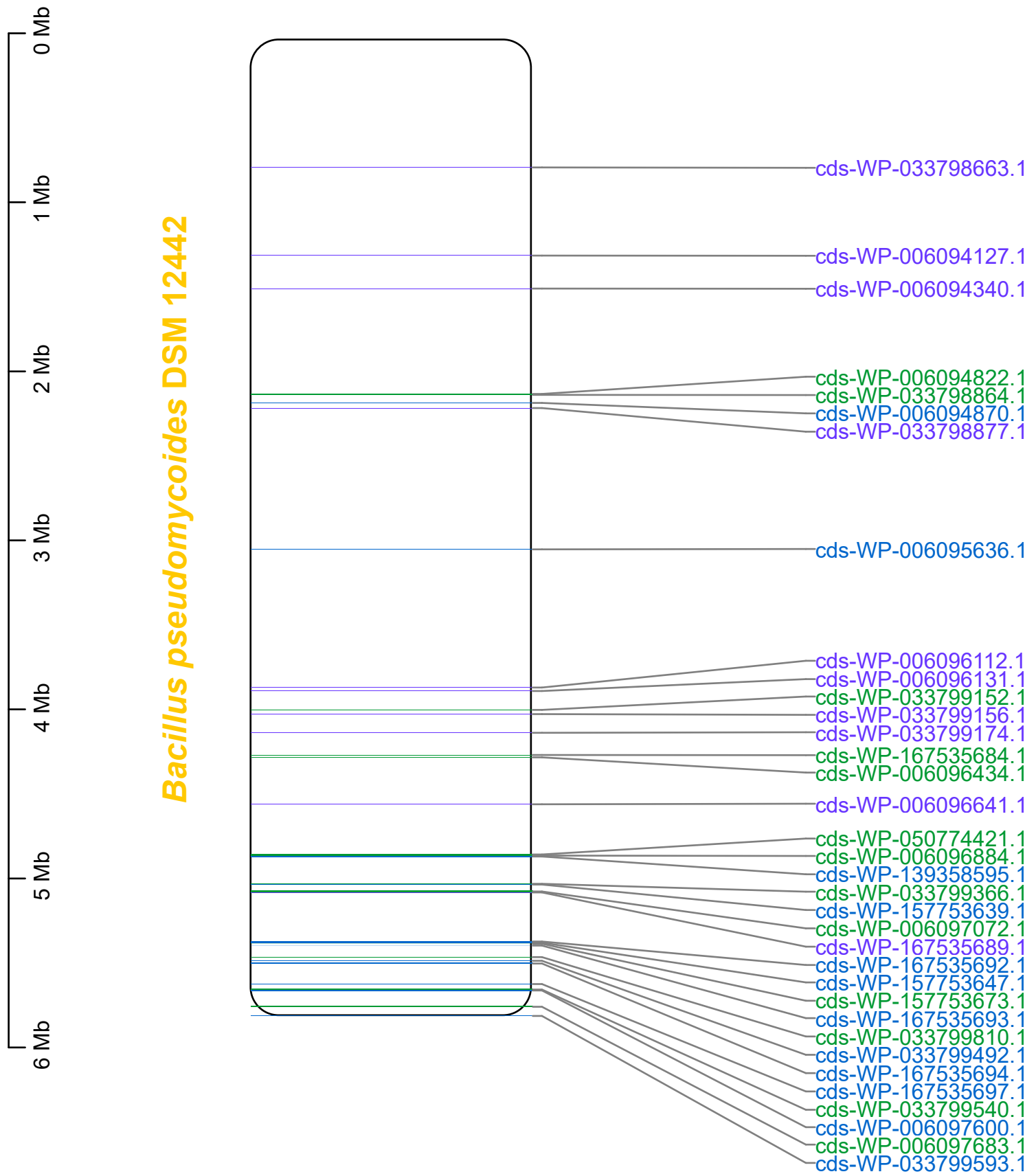




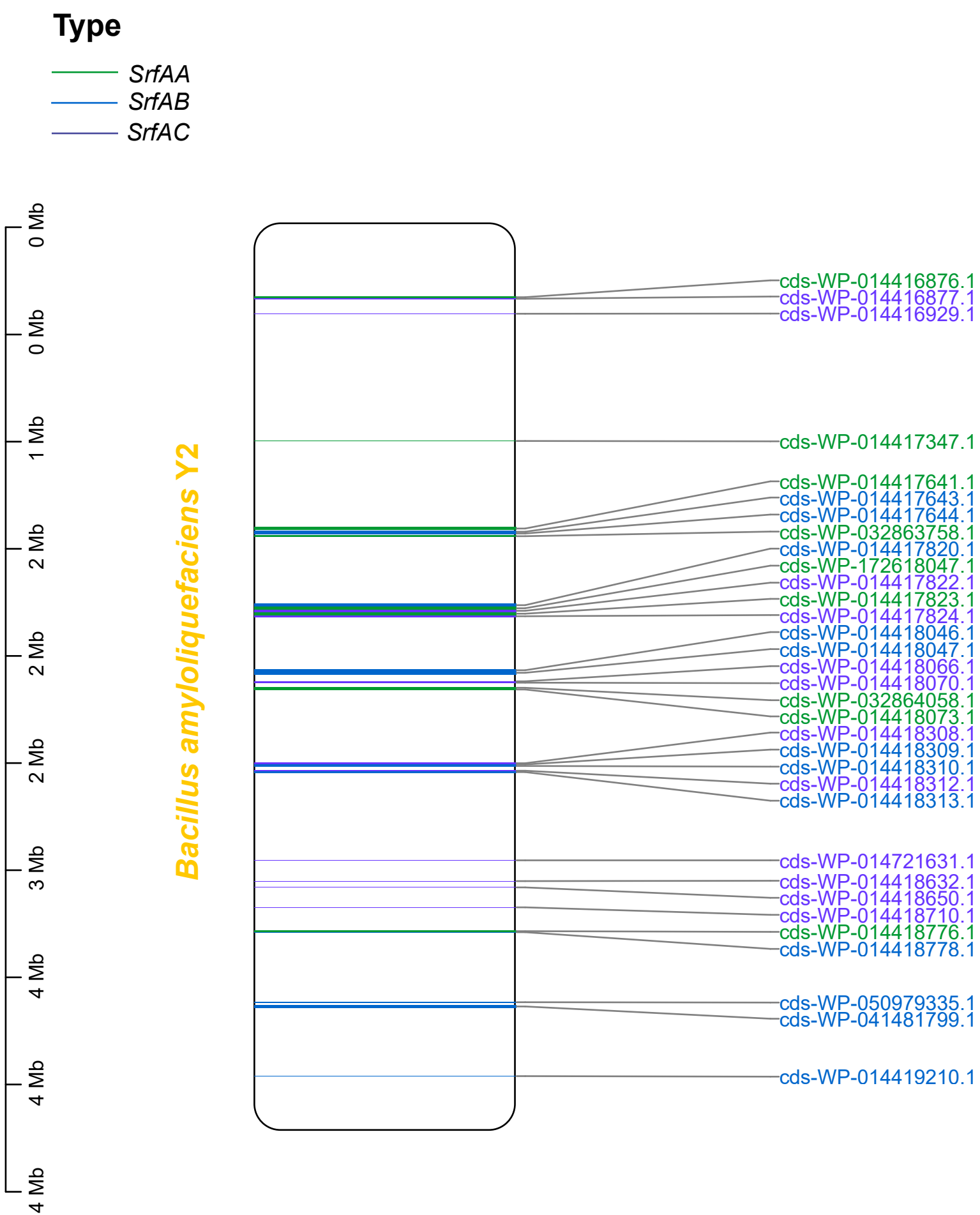
**Figure S18. Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus subtilis* subsp. *subtilis* str. 168 (GCF\_000009045) genome.**

## Type

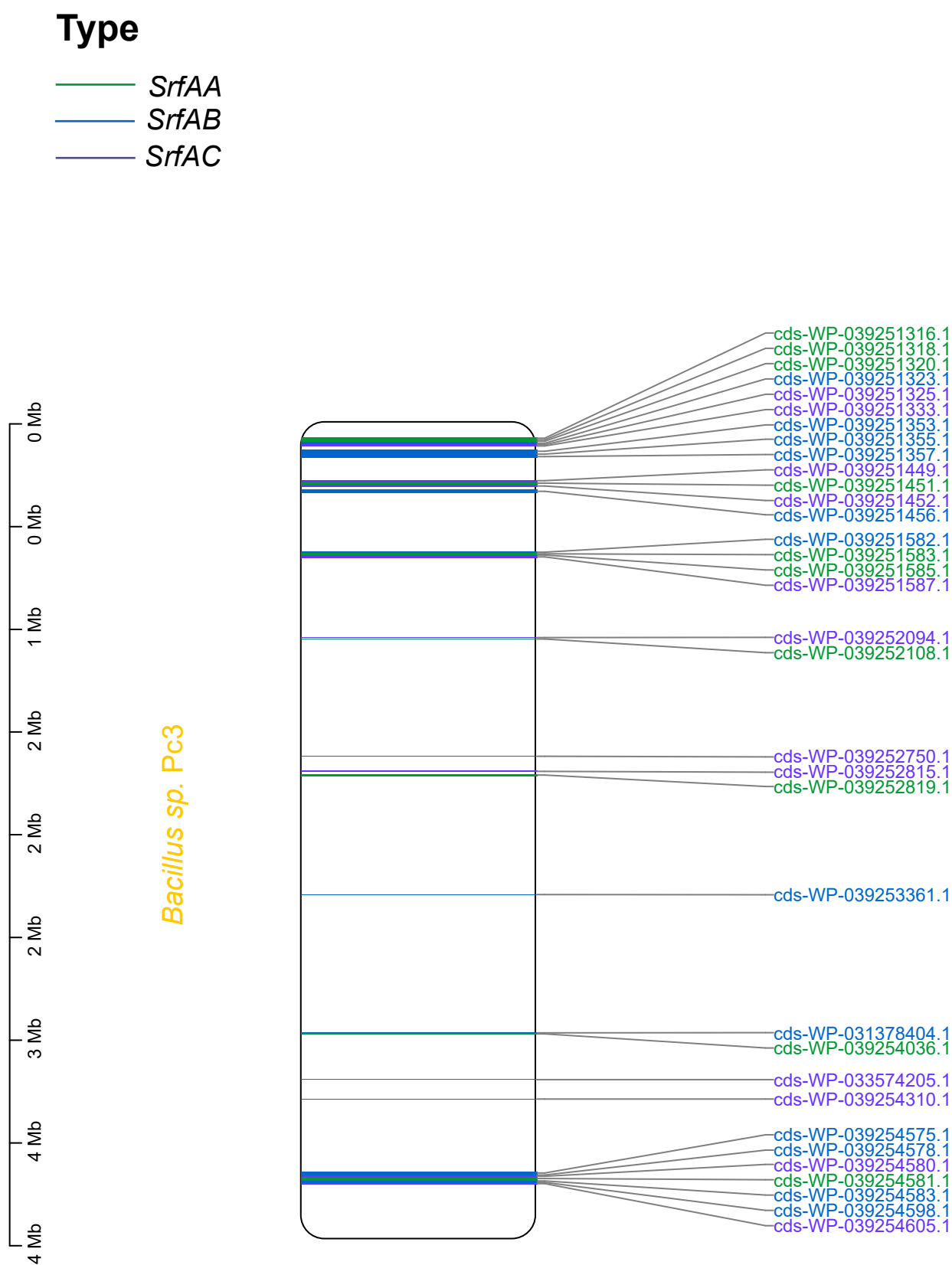
— *SrfAA*  
— *SrfAB*  
— *SrfAC*



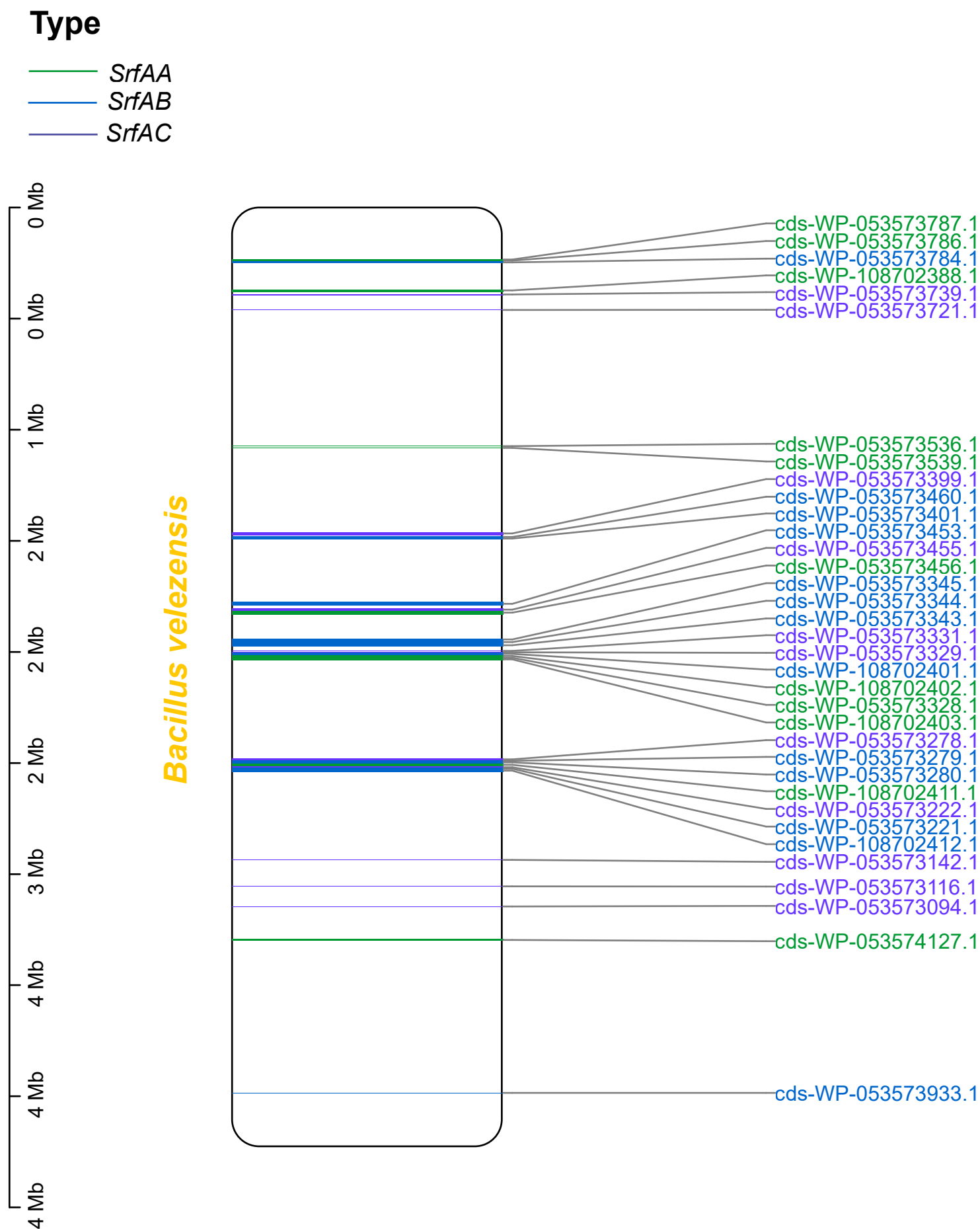
**Figure S19. Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus pseudomycolides* DSM 12442 (GCF\_000161455) genome.**



**Figure S20. Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus amyloliquefaciens* Y2 (GCF\_000262385) genome.**



**Figure S21. Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus sp. Pc3* (GCF\_000815145) genome.**

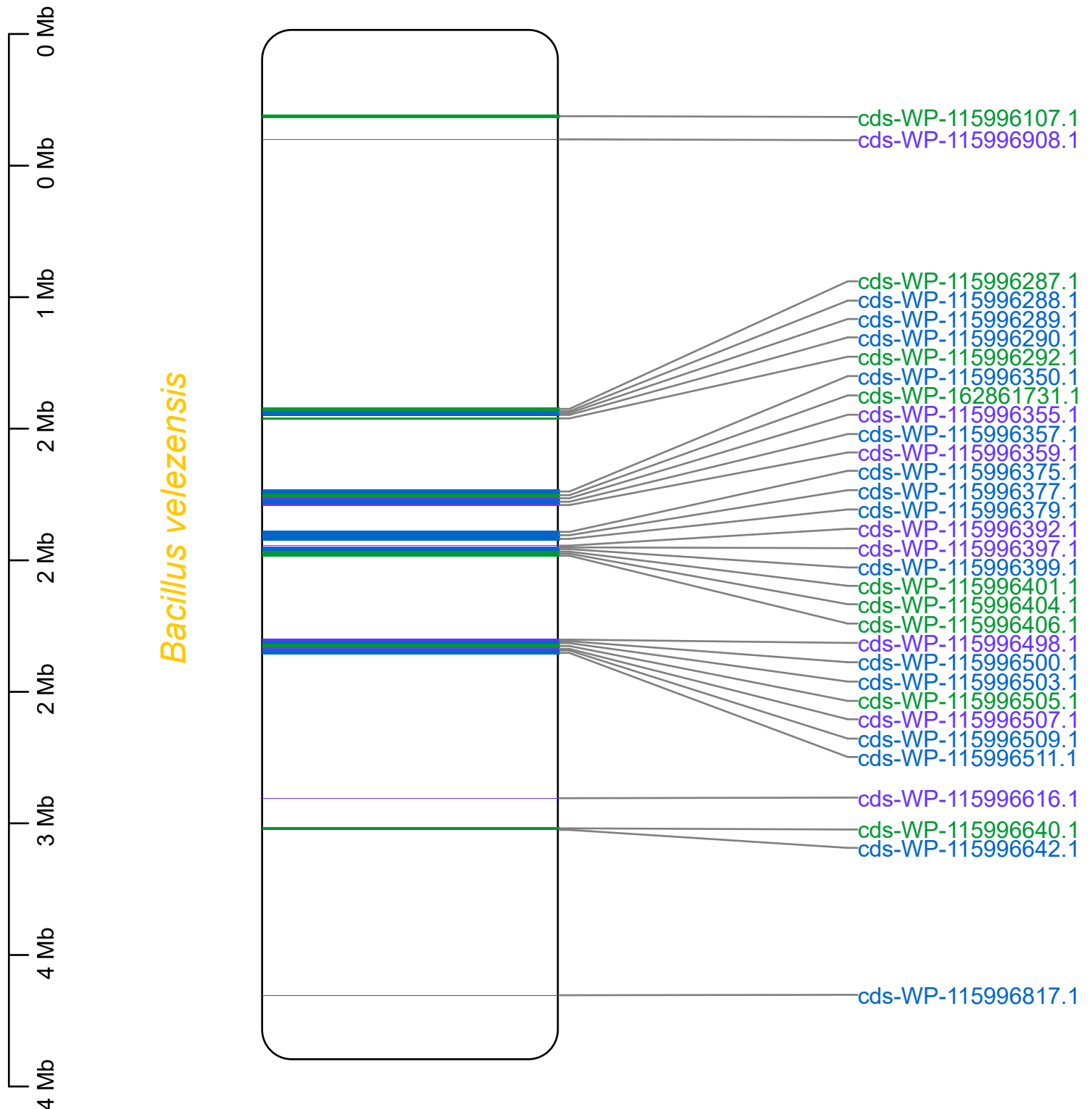


**Figure S22. Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus velezensis* (GCF\_003073255) genome.**

## Type

- *SrfAA*
- *SrfAB*
- *SrfAC*

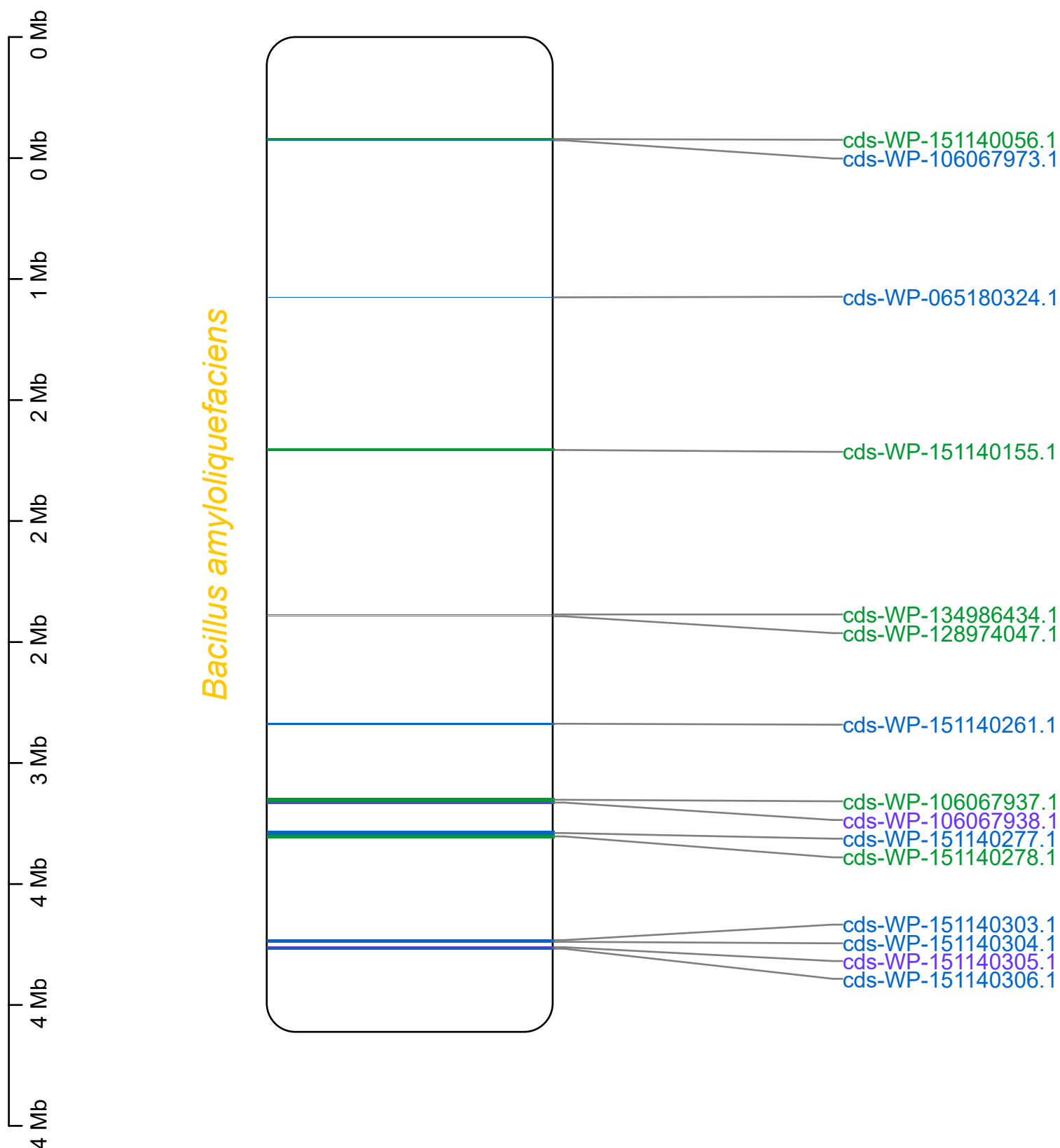
*Bacillus velezensis*



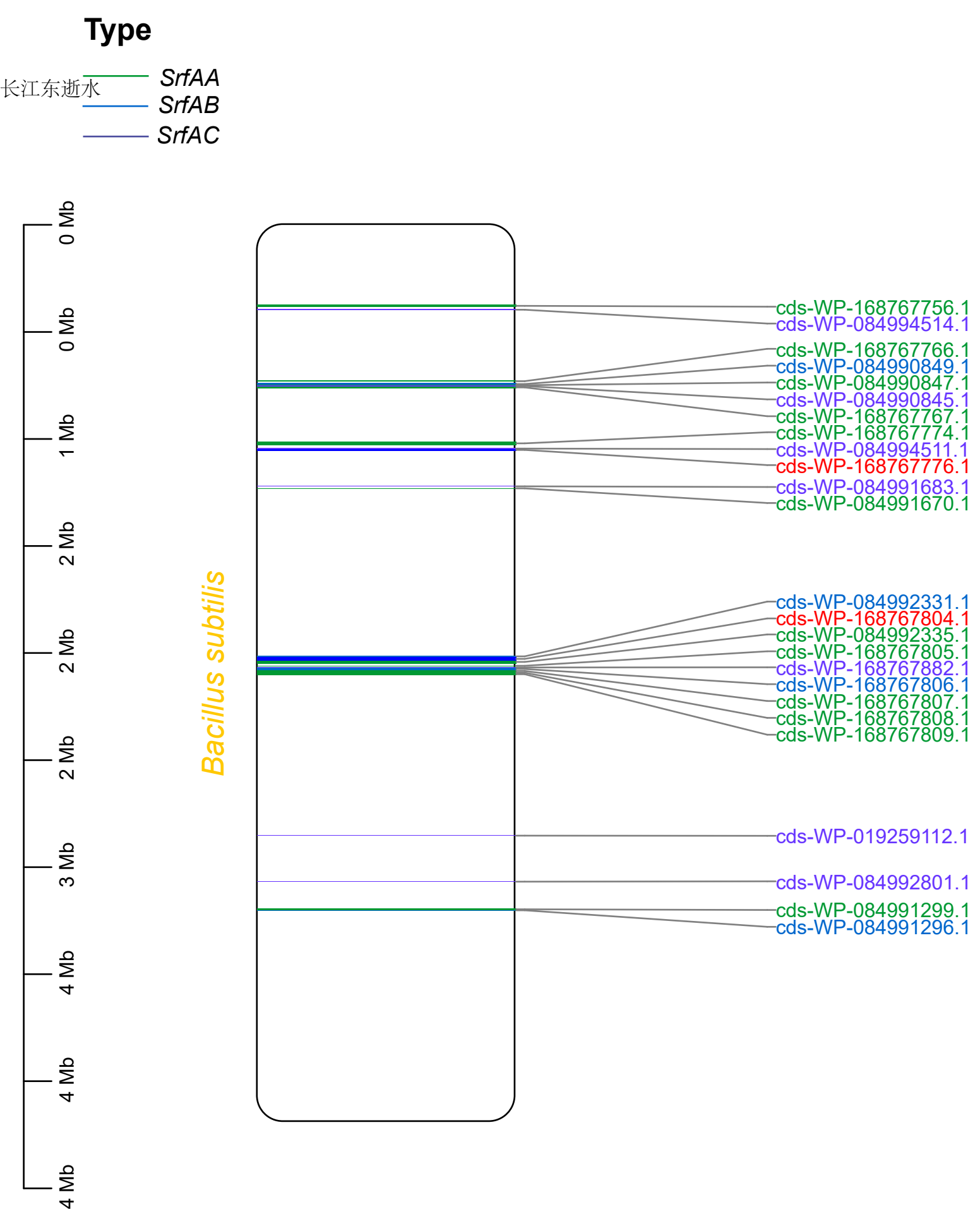
**Figure S23. Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus velezensis* (GCF\_003390415) genome.**

## Type

- *SrfAA*
- *SrfAB*
- *SrfAC*

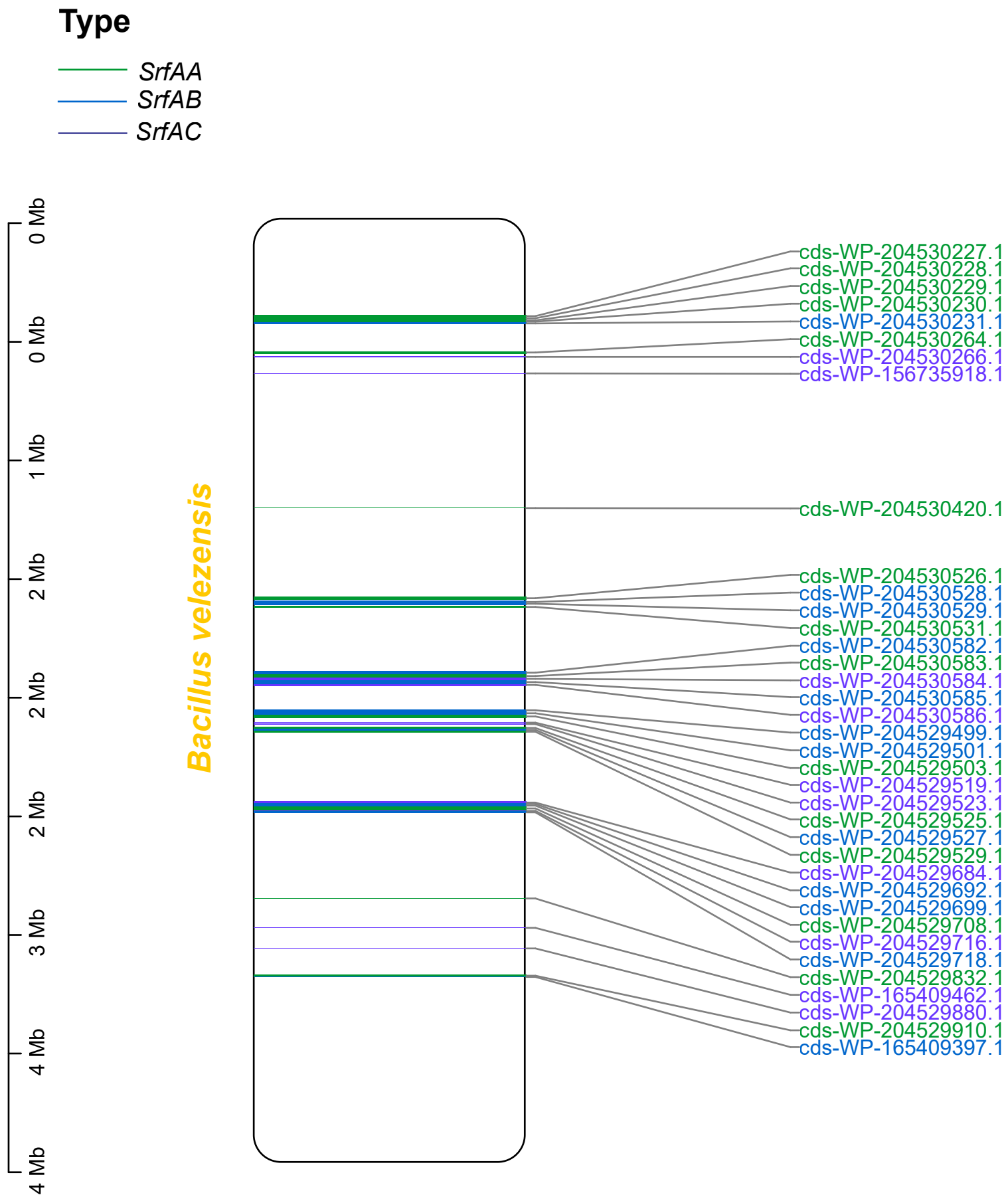


**Figure S24. Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus amyloliquefaciens* (GCF\_008824205) genome.**



**Figure S25. Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus subtilis* (GCF\_012647565) genome.**





**Figure 26. Distribution of *SrfAA*, *SrfAB* and *SrfAC* genes in the *Bacillus velezensis* (GCF\_016904925) genome.**