

-Supplementary Information-

Impact of a bathing tradition on shared gut microbe among Japanese families

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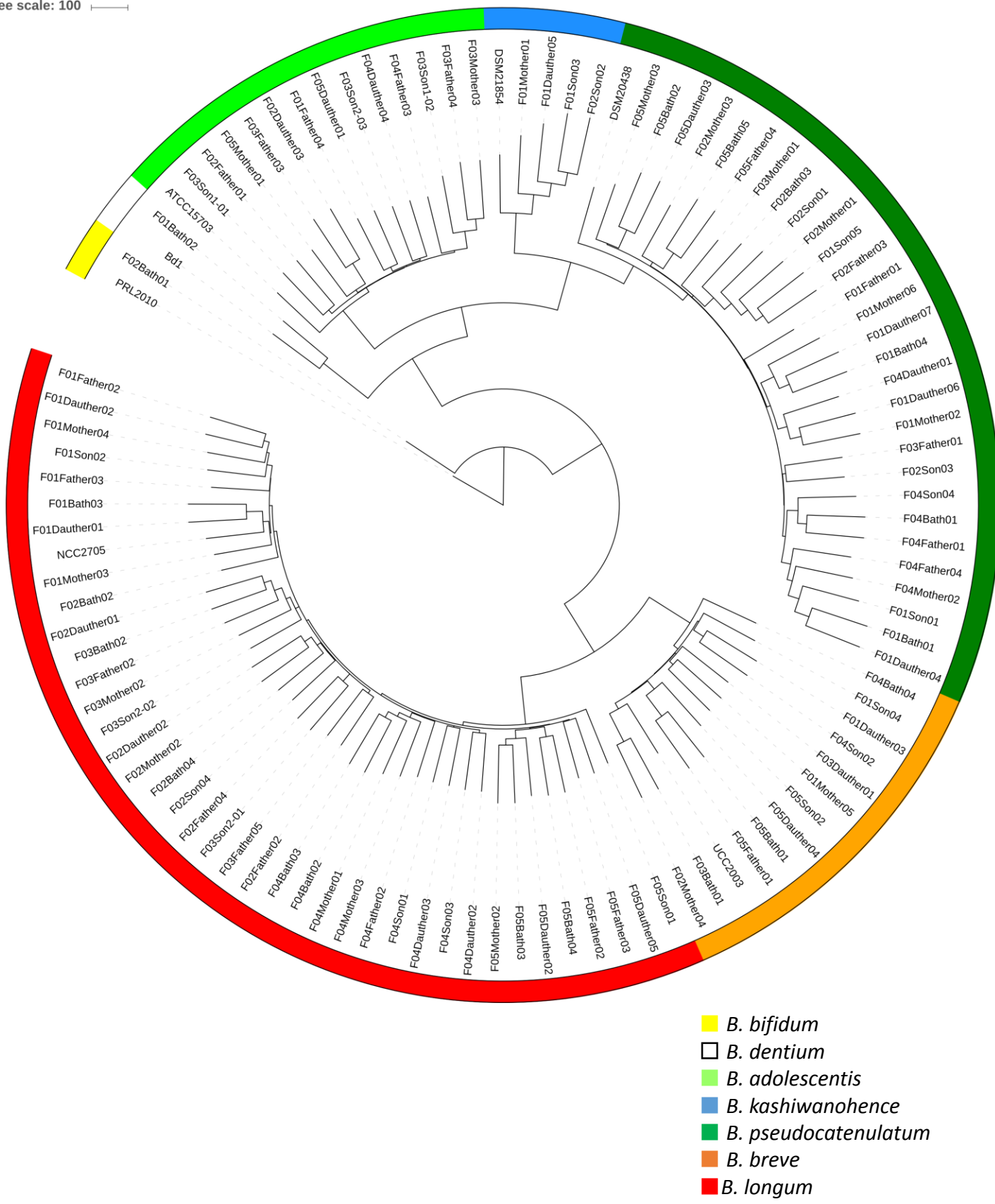
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Inventory of Supplementary Information

1. Supplementary Figures and Legends
Supplementary Figure S1-S2
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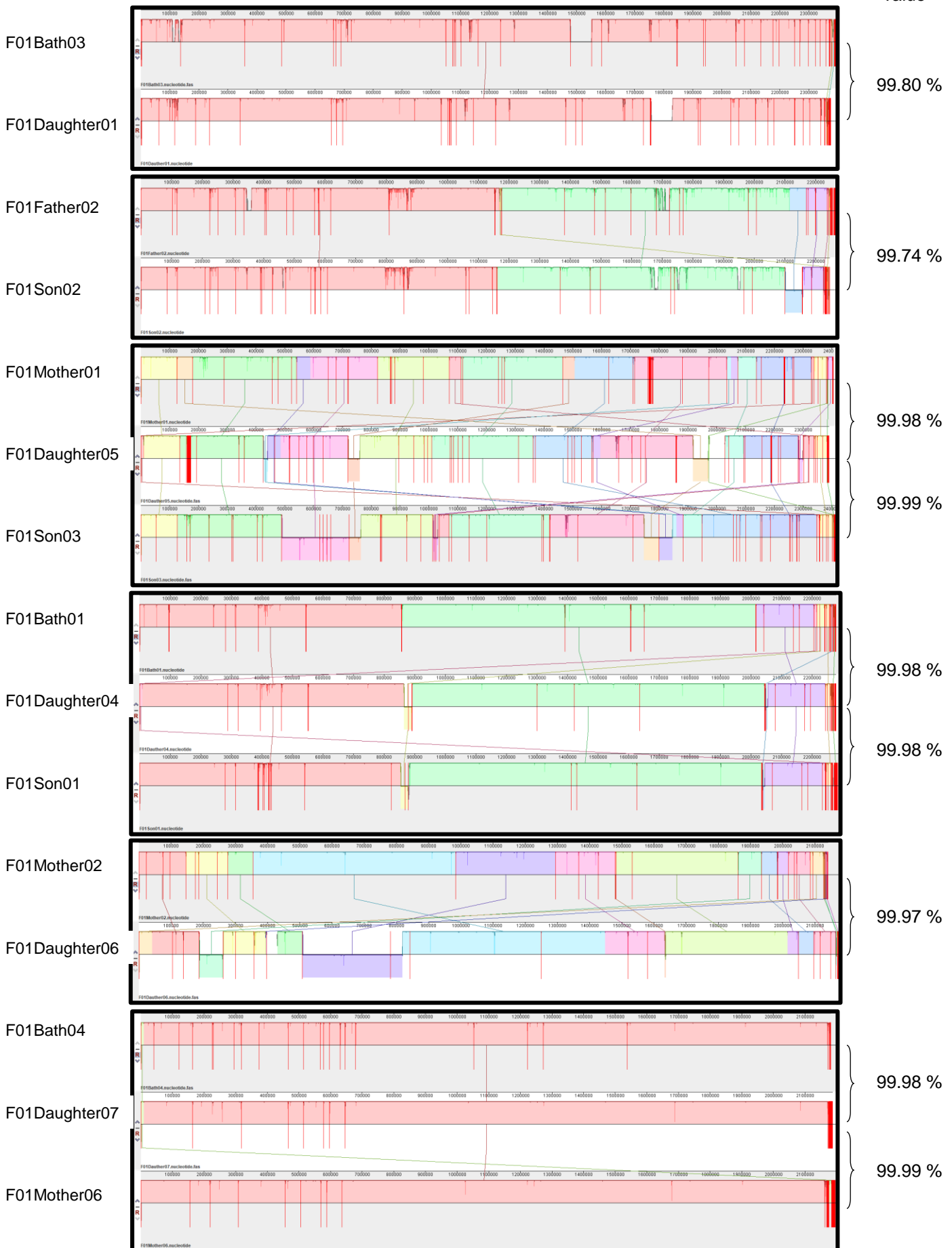
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Supplementary Fig. 1
Cladogram of Bifidobacterial strains

We identified taxonomical classification of all isolates by the phylogenetic analysis performed on the *Bifidobacterium* core genome.

ANI value

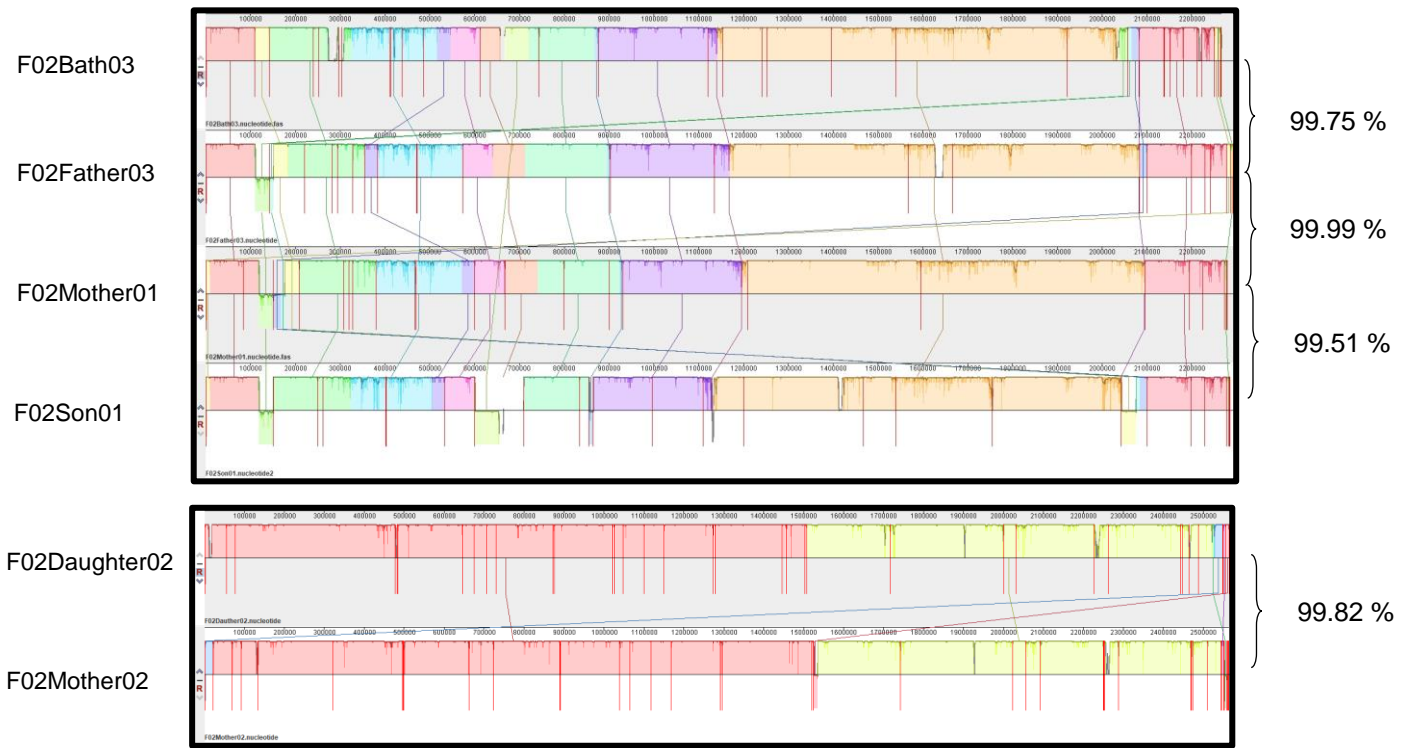


Supplementary Fig. 2a

Sequence similarity between strains putatively transmitted among family1 members and bathtub water

Related to Figure2. As shown in Mauve whole nucleotide alignment, certain strain-sets which were isolated from feces and bathtub water share near identical genome sequences, suggesting that bifidobacterial strains isolated from bathtub water were from family member. General features of each of the newly determined *Bifidobacterium* genomes

ANI value



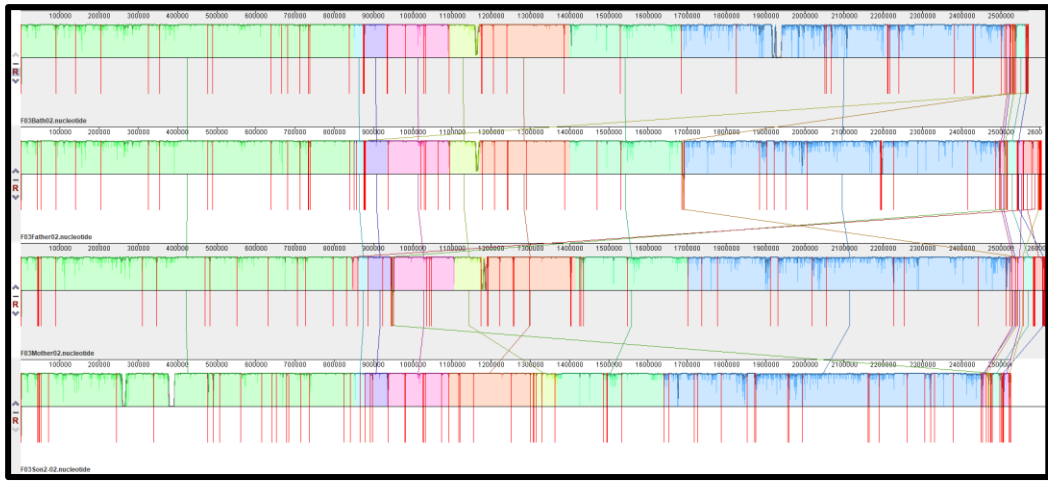
Supplementary Fig. 2b

Sequence similarity between strains putatively transmitted among family2 members and bathtub water

Related to Figure2. As shown in Mauve whole nucleotide alignment, certain strain-sets which were isolated from feces and bathtub water share near identical genome sequences, suggesting that bifidobacterial strains isolated from bathtub water were from family member. General features of each of the newly determined Bifidobacterium genomes

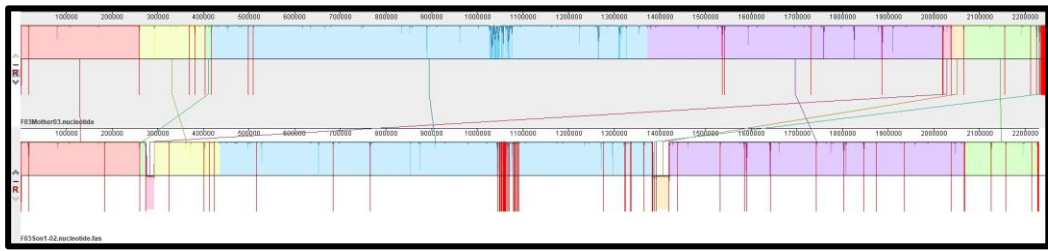
ANI value

F03Bath02
F03Father02
F03Mother02
F03Son2-02



99.82 %
99.80 %
99.78 %

F03Mother03
F03Son1-02



99.97 %

Supplementary Fig. 2c

Sequence similarity between strains putatively transmitted among family3 members and bathtub water

Related to Figure2. As shown in Mauve whole nucleotide alignment, certain strain-sets which were isolated from feces and bathtub water share near identical genome sequences, suggesting that bifidobacterial strains isolated from bathtub water were from family member. General features of each of the newly determined Bifidobacterium genomes

F04Father04

F04Mother02

F04Son4

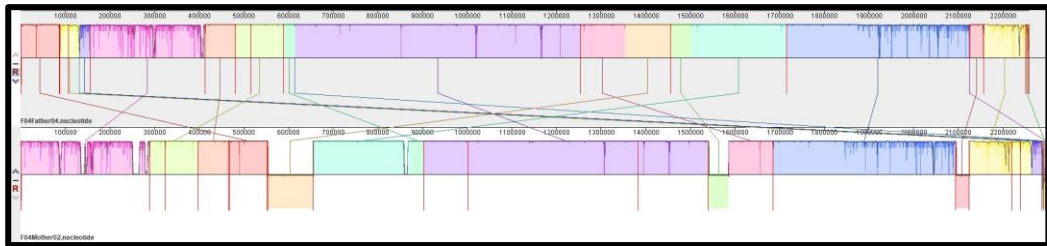
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F04Bath02

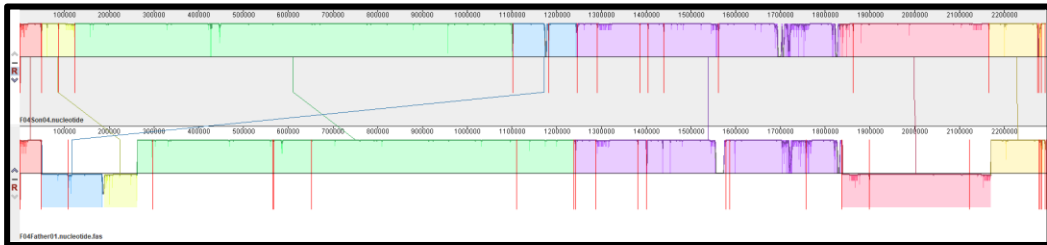
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F04Bath03

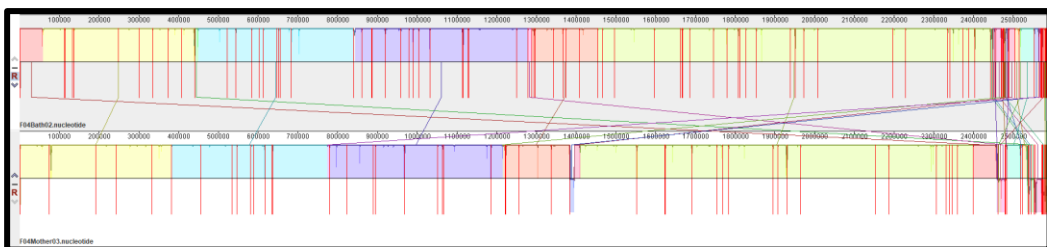
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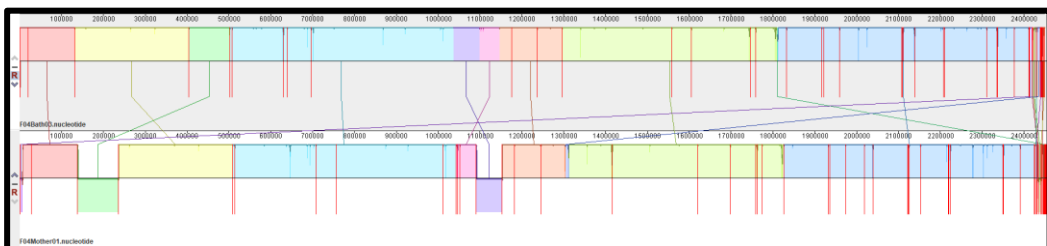
99.61 %



99.82 %



99.99 %



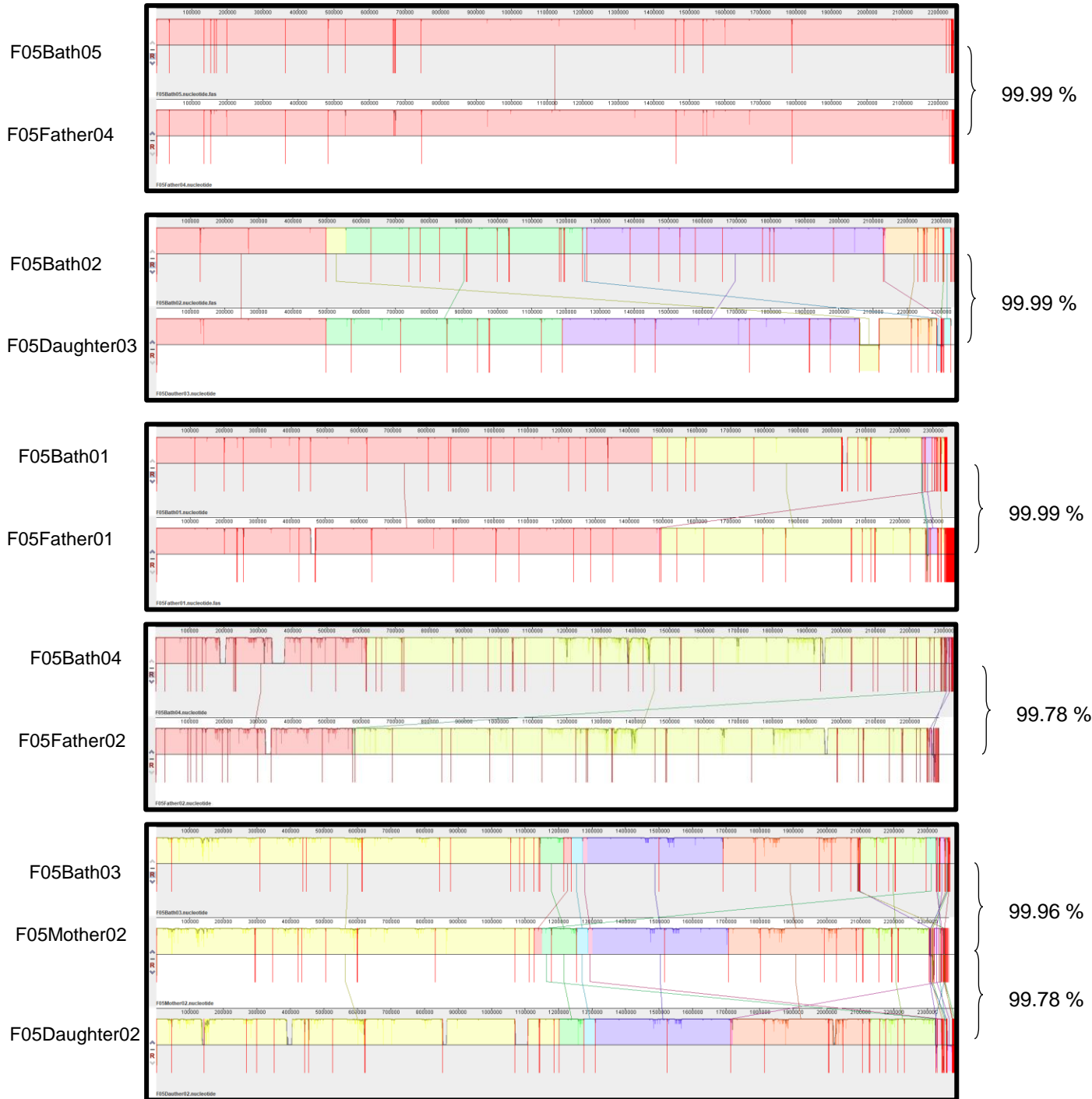
99.99 %

Supplementary Fig. 2d

Sequence similarity between strains putatively transmitted among family4 members and bathtub water

Related to Figure2. As shown in Mauve whole nucleotide alignment, certain strain-sets which were isolated from feces and bathtub water share near identical genome sequences, suggesting that bifidobacterial strains isolated from bathtub water were from family member. General features of each of the newly determined Bifidobacterium genomes

ANI value



Supplementary Fig. 2e

Sequence similarity between strains putatively transmitted among family5 members and bathtub water

Related to Figure2. As shown in Mauve whole nucleotide alignment, certain strain-sets which were isolated from feces and bathtub water share near identical genome sequences, suggesting that bifidobacterial strains isolated from bathtub water were from family member. General features of each of the newly determined *Bifidobacterium* genomes