

**IncP1**

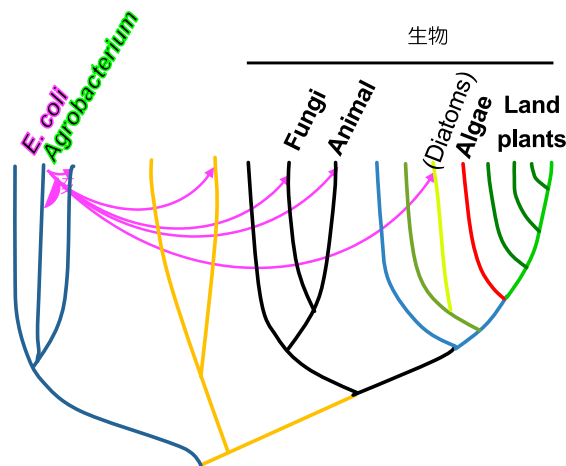


**IncP1**

**RP4**

*fmR, iscA, sufA*

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**IncP1**



*iscA, sufA*

*fmR*

① 遺伝子導入ツール

**FmR**

関係

**CsoR/RcnR**

**IscA**

**SufA**

② 薬剤耐性遺伝子の拡散

図1 IncP1型プラスミド横伝による遺伝的水平伝播

**IncP1**

接合反応時間  
□ 1 時間  
■ 6 時間

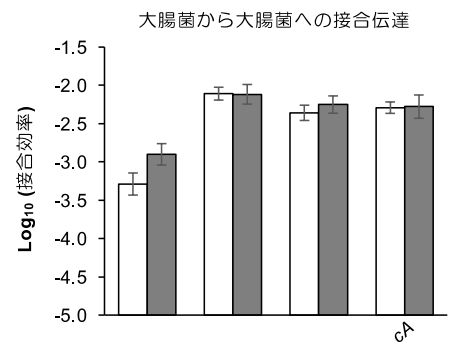


図2 変

**IncP1**

**IncP1**

**FmR**

**IscA**

**SufA**

**IncP1**

**DNA**

**DNA**

**: Frontiers in Microbiology**

**: Isolation and Analysis of Donor Chromosomal Genes Whose  
Deficiency Is Responsible for Accelerating Bacterial and Trans- Kingdom  
Conjugations by IncP1 T4SS Machinery**

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**doi 10.3389/fmicb.2021.620535**

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