Bacteriophage Name: Rosebush

Cluster: B2
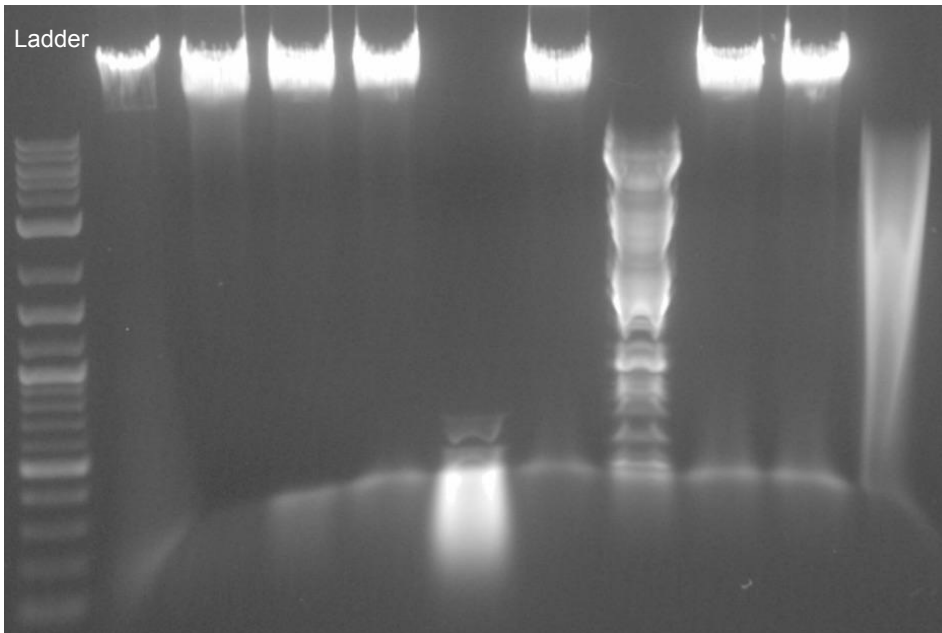
Host Bacterium: *Mycobacterium smegmatis* mc²155

Actual Digest

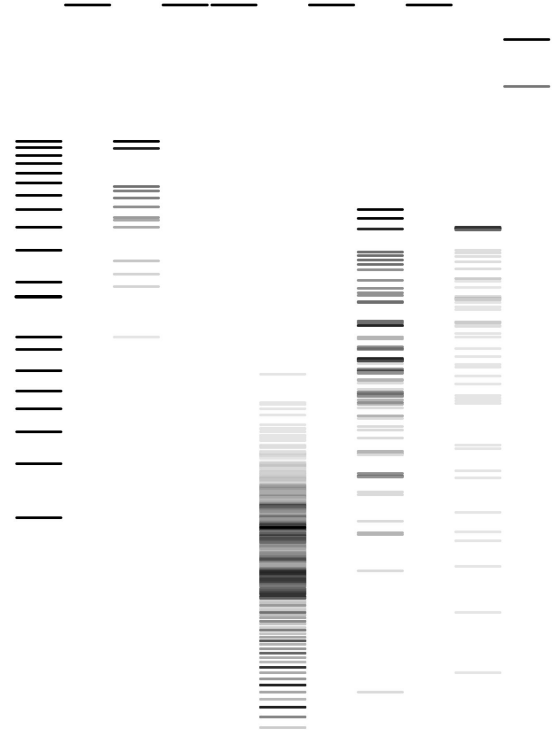**Virtual Digest**

Enzyme Used

Cut Pattern

Uncut BamHI ClaI EcoRI HaeIII HindIII NspI SacII SalI
MseI
B   E   E   E   E   E   E   B   I

Ladder Uncut ClaI HaeIII NspI SalI
       BamHI EcoRI HindIII SacII MseI

E = Expected

I = Impaired

B = Blocked

As a control, we reproduced the results published with *Enterobacteria*phage 9g DNA (Fig. 5a); no digestion was observed with BamHI, EcoRI, EcoRV, and SwaI, while it was partially restricted with BstXI, HaeIII, MluI, NdeI, and PciI.

Mycobacterium phage Rosebush DNA that carries preQ$_0$ showed a slightly different pattern of resistance. The restriction profiles for BamHI, BstXI, and EcoRV were identical to those of *Enterobacteria* phage 9g. However, Rosebush DNA was fully sensitive to HaeIII, MluI, and PciI and resisted NdeI degradation (Fig. 5b). EcoRI and SwaI could not be tested because the corresponding sites are absent in the *Mycobacterium*phage Rosebush genome.