Virology Capability of the SBCCOM Microbiology Team

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Virology Capability of the SBCCOM Microbiology Team

1. Detection and Identification
2. Viral Persistence Testing
3. Decon Evaluation

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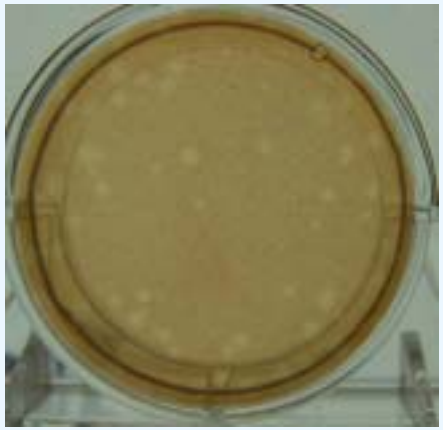
Virus Detection and Identification

Standard Virus Culture Methods



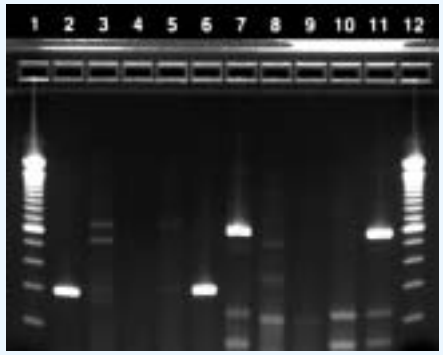
Unknowns Cultured at BSL-3

BSL-2 Facilities Available

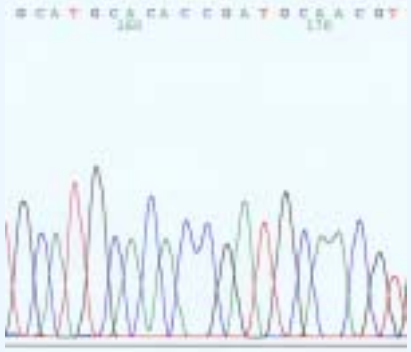
Virus Detection and Identification

Molecular Methods
Detect and Identify Viral RNA or DNA

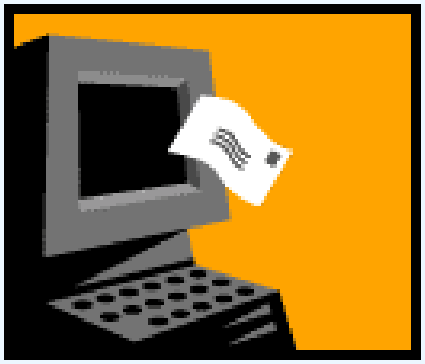
PCR and RT-PCR



Sequence



Computer Sequence Analysis



Virus Detection and Identification

```
>gi|2072061|gb|U94608.1|FMU94608    Fort Morgan virus nonstructural pr
1 (nsP1) gene, partial cds
          Length = 375

 Score =  387 bits (195), Expect = e-105
 Identities = 209/211 (99%), Gaps = 2/211 (0%)
 Strand = Plus / Plus


Query: 1    agagcggctgcgcaggagcgacatcactaaca-gcgcattgcctctaaggcagctgattt
            ||||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||
Sbjct: 147  agagcggctgcgcaggagcgacatcactaacaagcgcattgcctctaaggcagctgattt


Query: 60   gctgcaagtcttgtccgcgccagattcagagactcaatcgctctgcatgcacaccgatgc
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 207  gctgcaagtcttgtccgcgccagattcagagactcaatcgctctgcatgcacaccgatgc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            |||||||||||||||||||||||||||||||||||||||| |||||||||||||||||||
Sbjct: 267  aacgtgcagttatcaaggcaccgtggcagtttacca-ggatgtttacgctgtgcatgccc


Query: 180  ctacctcaatttactatcaagctatgaaagg 210
            |||||||||||||||||||||||||||||||
Sbjct: 326  ctacctcaatttactatcaagctatgaaagg 356
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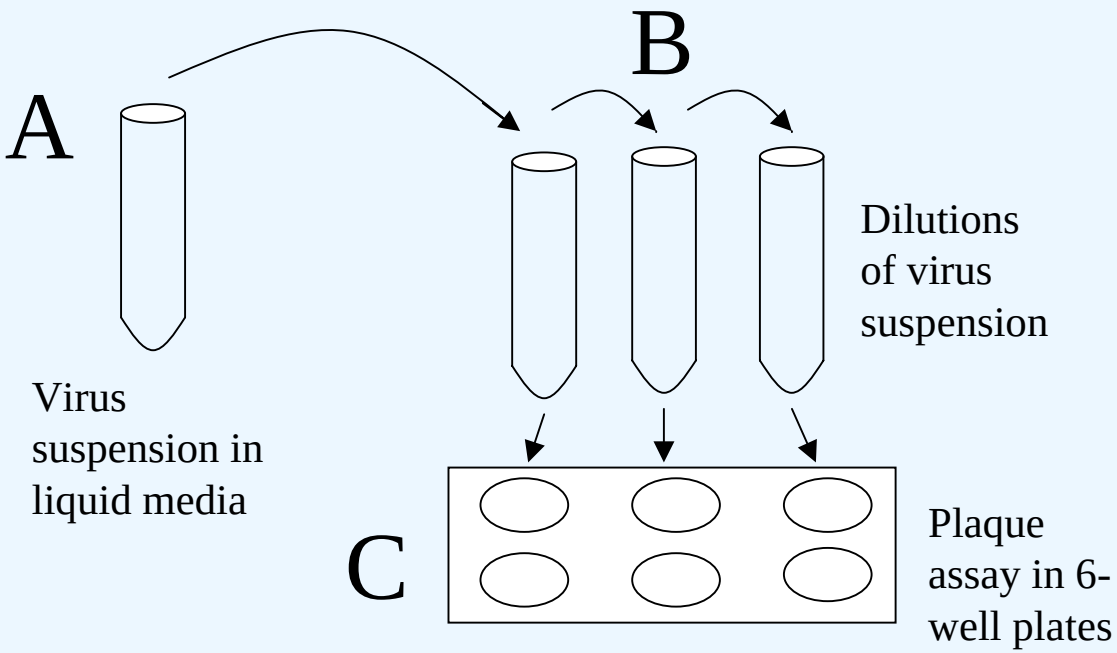
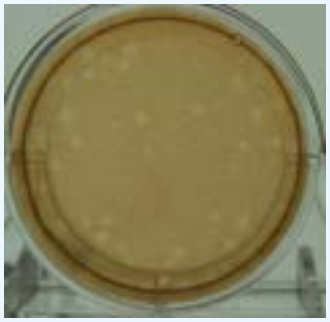
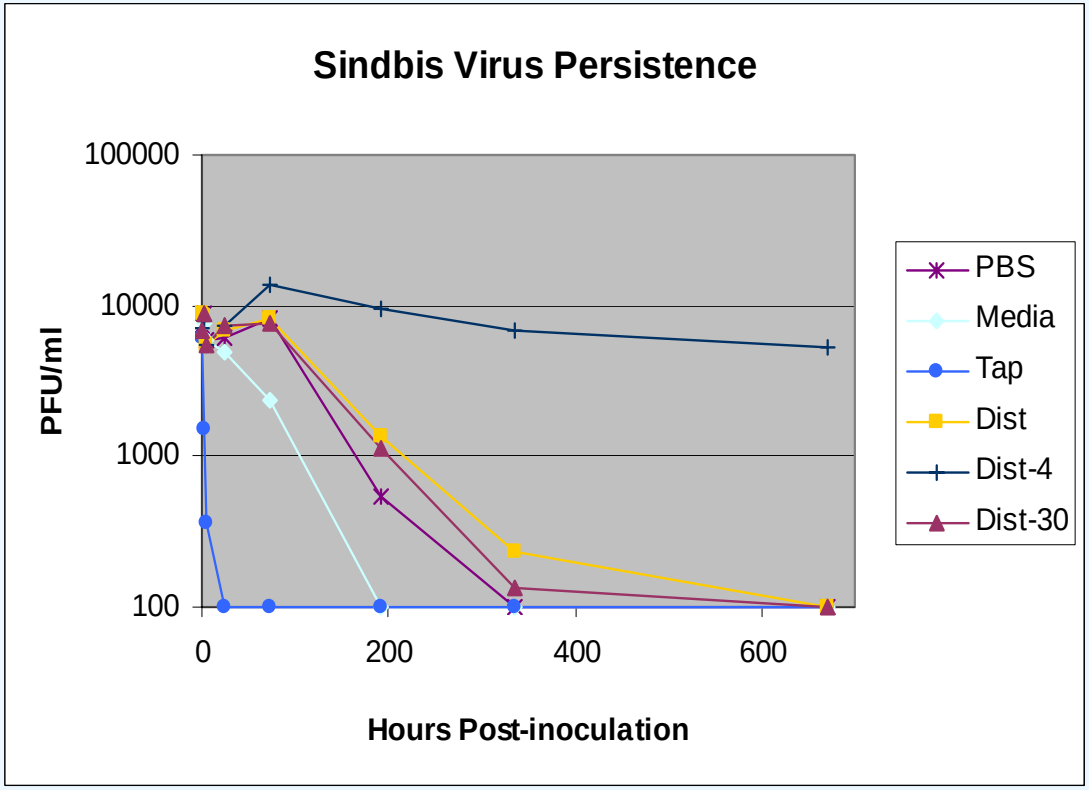
Viral Persistence Testing

BSL-3 and BSL-2 Viruses in Liquid Media or on Surfaces





Viral Persistence Testing



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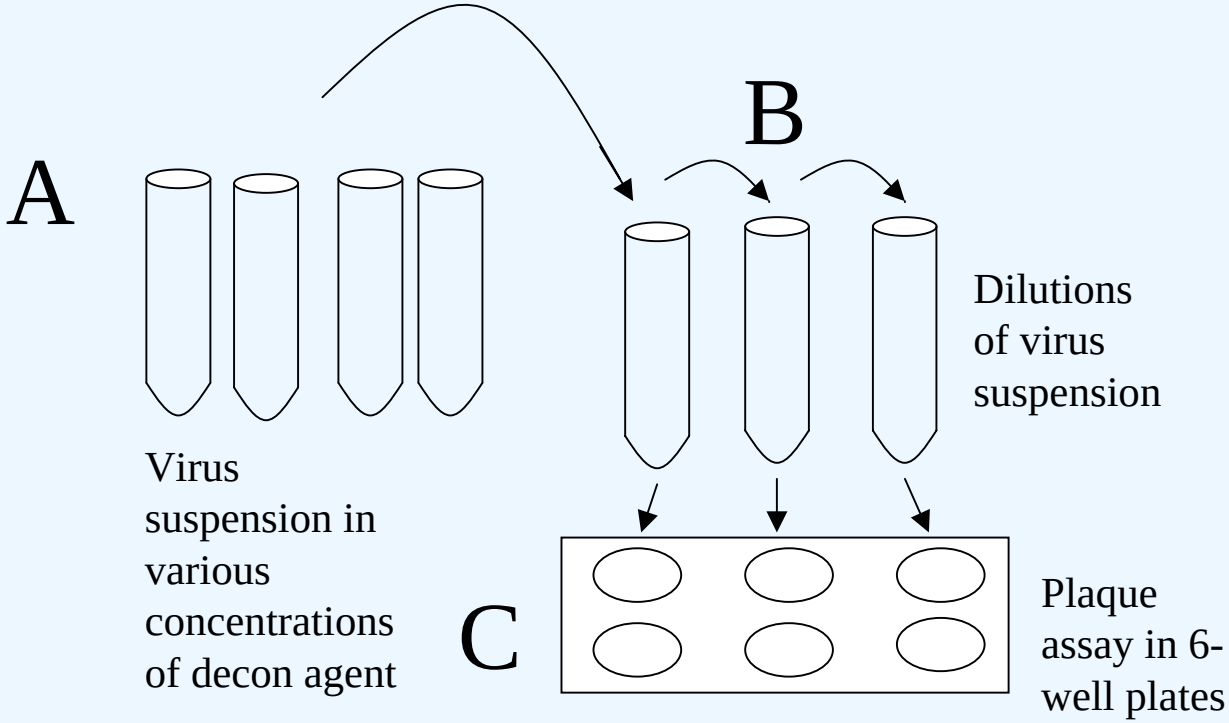
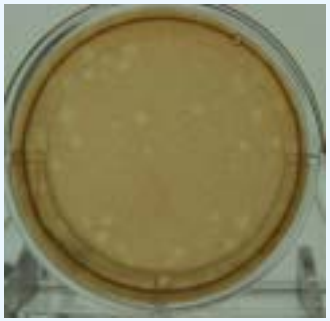
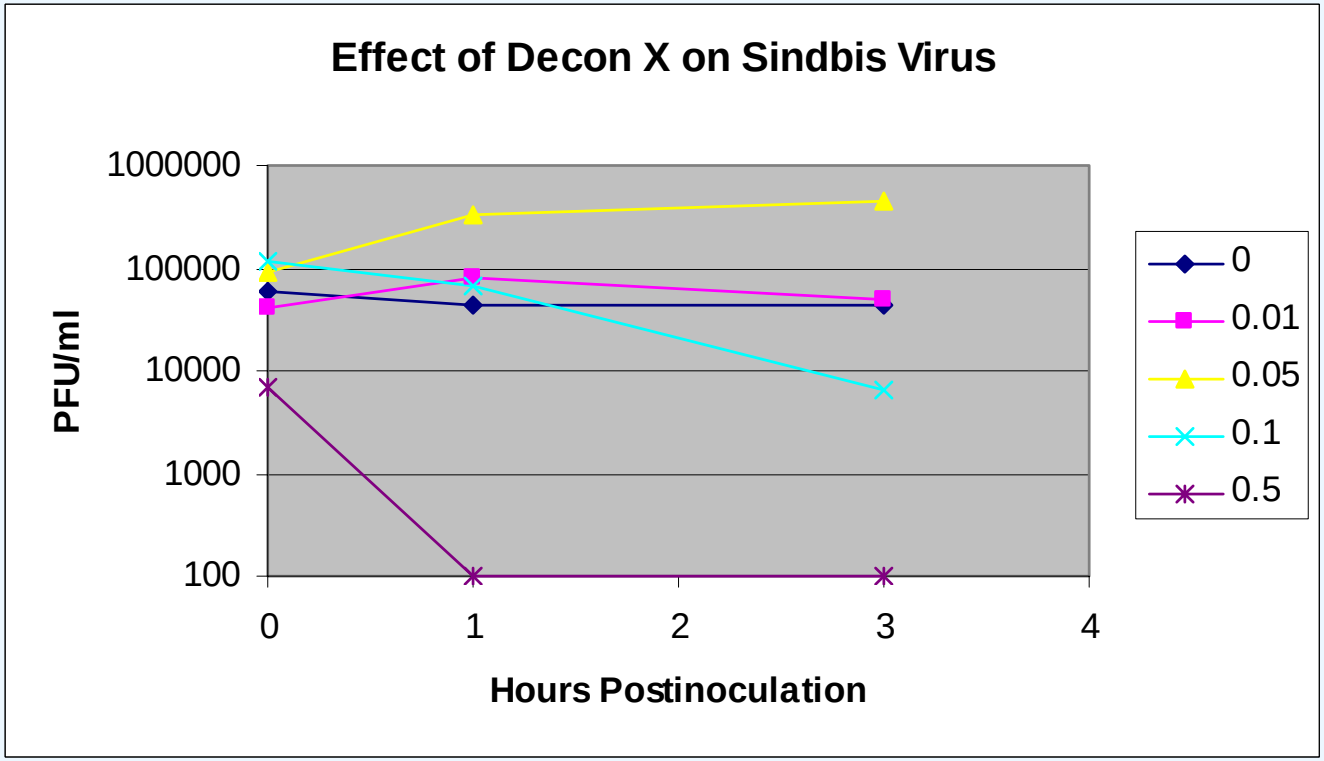
Decon Testing

Ability of Decon Agents to Inactivate Viruses





Decon Testing