

Confirmation that CRISPR samples were cut with PvuII

Restriction Digest

1. Label 4 microreaction tubes
2. Add all components to each tube in the order shown:

2 μ L 10x buffer
2 μ L restriction enzyme
10 μ L sterile water

Additionally in tube 2 add 3ul of mutated SERPINA

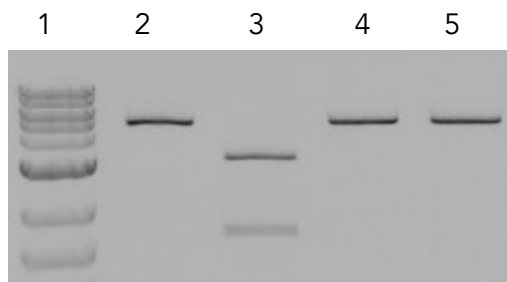
In tube 3 add 1ul of SERPINA, 1ul of sgRNA & 1ul of CAS9 nuclease

In tube 4 add 2ul of SERPINA & 1 ul of sgRNA

In tube 5 add 2ul of SERPINA & 1ul of CAS9 nuclease

Total volume 17ul per tube

3. Incubate the restriction digest at 37°C for 1 hour.
4. Add 2ul of loading dye and place samples into prepared 8% agarose gel with 1x TBE buffer.
5. Run for 30 min at 150V
6. Remove from Electrophoresis Chamber
7. Place Blue Stain Card on top of gel for 10min
8. Destain with distilled water
9. Take picture, analyze and confirm



Lane 1 DNA standard markers

Lane 2: Mutated SERPINA

Lane 3: Mutated SERPINA & sgRNA & Cas9 Nuclease

Lane 4: Mutated SERPINA & Cas9 Nuclease

Lane 5: Mutated SERPINA & sgRNA

Shows confirmation that samples were successfully cut