**Stringent response induced by amino acid starvation not involved in mediating broad spectrum antibiotic resistance in *Escherichia coli***

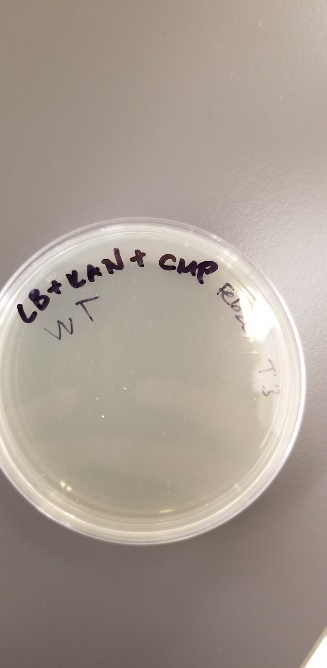
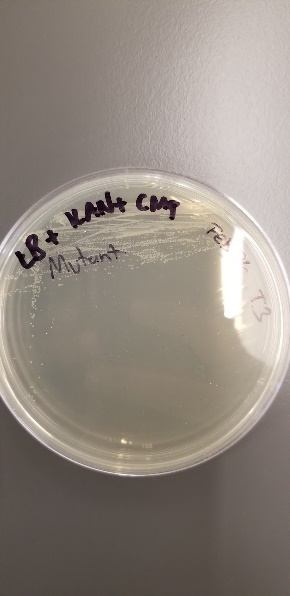
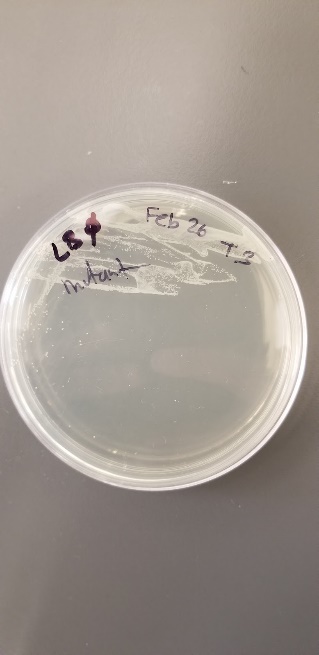
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**SUPPLEMENTAL MATERIAL**

**Supplemental Table 1: MIC values of WT *E. coli* and Δ*relA*/Δ*spoT* mutant in starved and unstarved conditions.** The addition of L-valine significantly decreased (> 2-fold change) the ampicillin and streptomycin MIC values of the Δ*relA*/Δ*spoT* mutant. No other significant change was observed.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **MIC** | | | |
| **WT** | | **Δ*relA*/Δ*spoT*** | |
| **L-valine** | **-** | **+** | **-** | **+** |
| **Ampicillin**  **(μg/mL)** | 3 | 1.5 | **3** | **0.75** |
| **Streptomycin**  **(μg/mL)** | - | - | **28** | **3.5** |
| **Polymyxin B**  **(ng/mL)** | 1 | 0.5 | 2 | 2 |
| **Tetracycline**  **(μg/mL)** | - | 10 | - | 5 |
| **Erythromycin**  **(μg/mL)** | - | - | 600 | 600 |



**A**

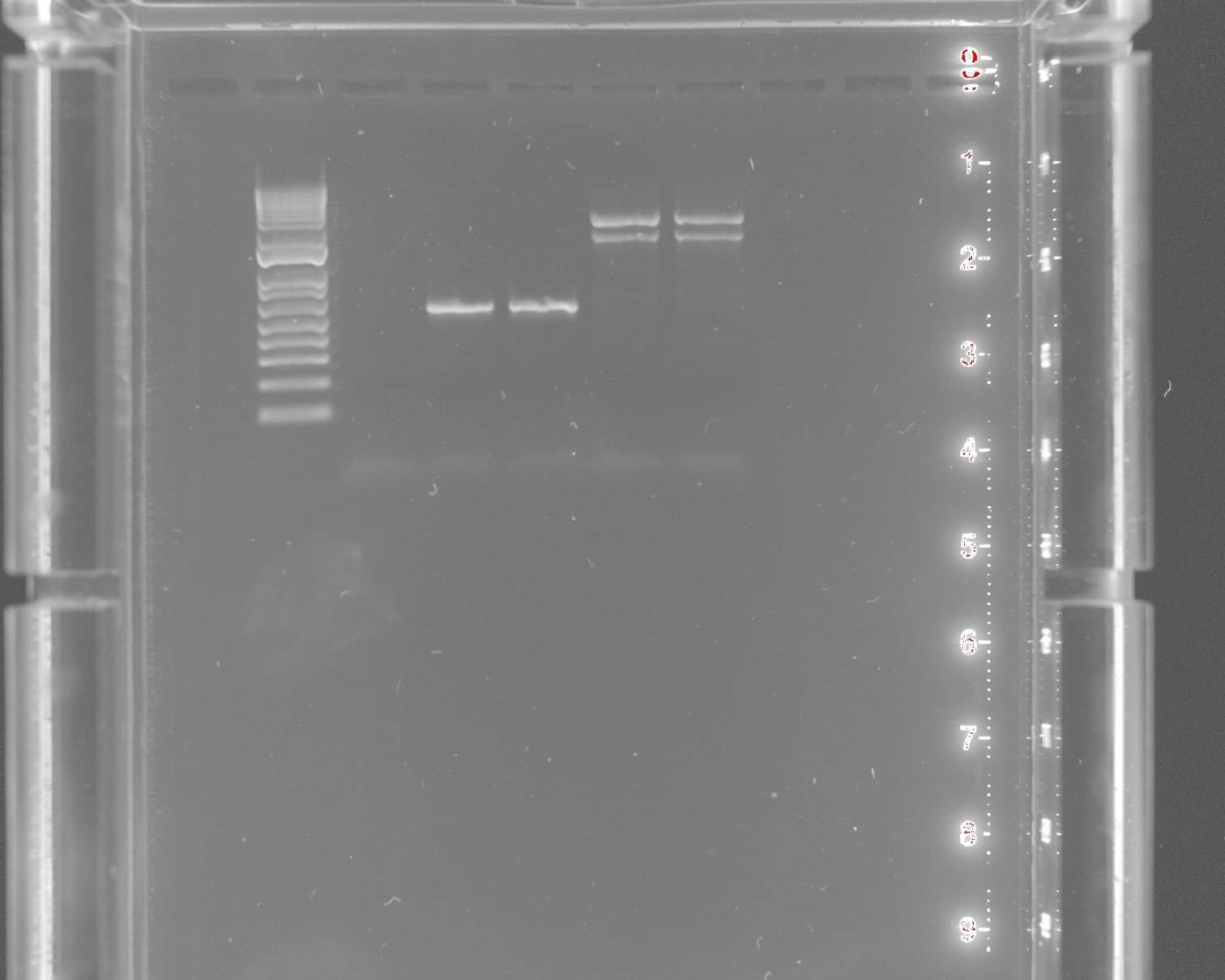
**B**

**C**

**D**

**Supplemental Figure 1: Kanamycin and chloramphenicol resistance cassettes present in the Δ*relA*/Δ*spoT* mutant but not in WT *E. coli****.**E. coli* BW25113 (WT) or *E. coli* SL11W447-4 (Δ*relA*/Δ*spoT* mutant) were grown on either LB media, with or without the addition of kanamycin (KAN) and chloramphenicol (CAM). Growth of the WT strain was observed on LB (**A**), but no growth was observed on LB + KAN/CAM (**B**). The mutant strain grew both in the presence and absence of antibiotics (**C,D**).

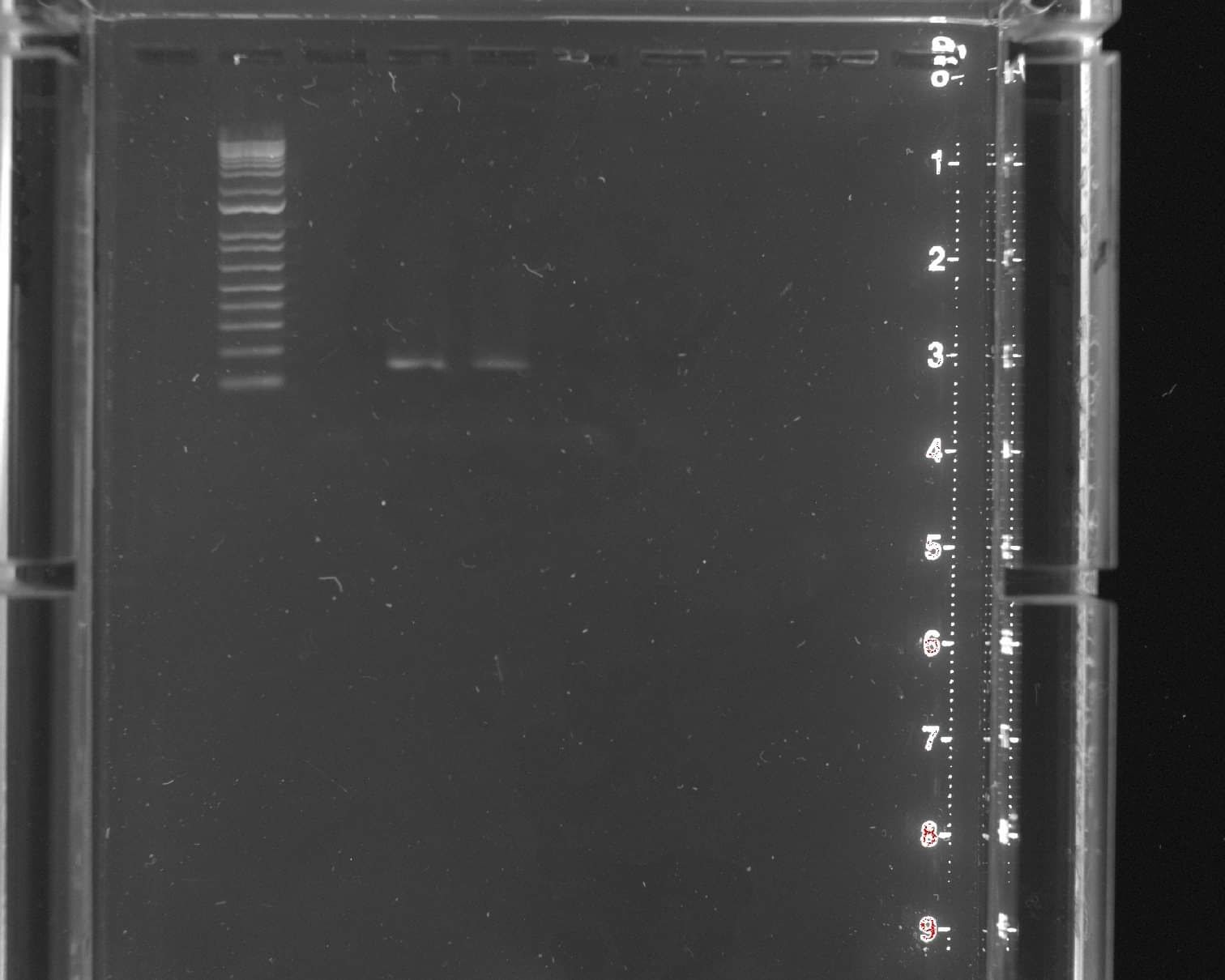
**A**



WT

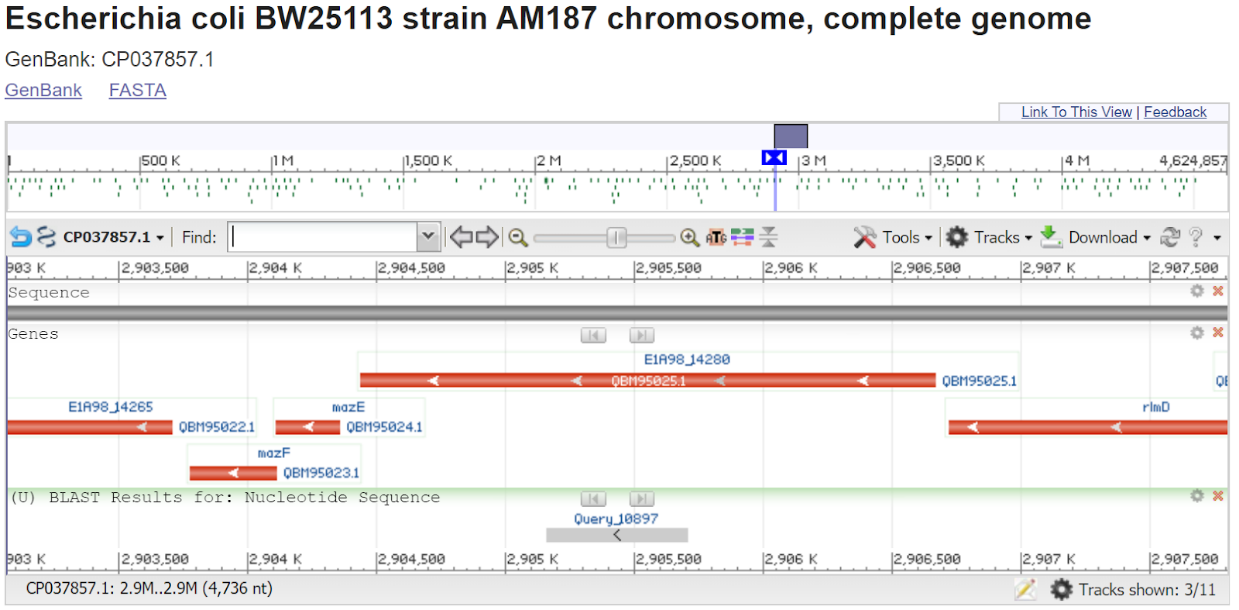
*ΔrelA/ΔspoT*

**B**

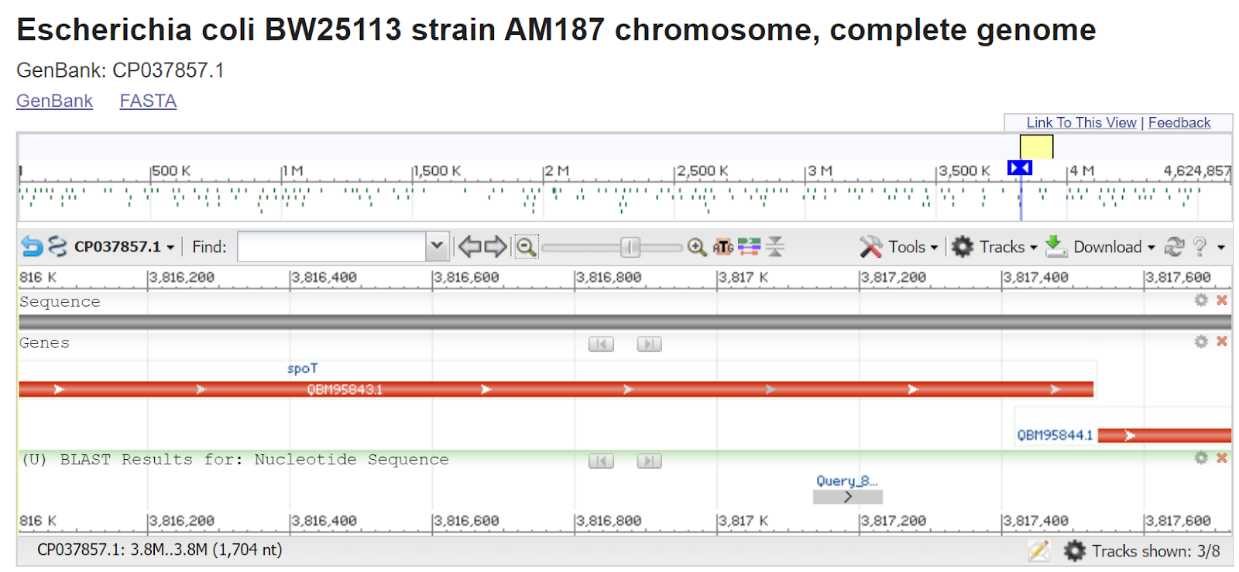


*ΔrelA/ΔspoT*

WT



**C**



**D**

600bp

150bp

**Supplemental Figure 2: *relA* and *spoT* are present in WT *E. coli* BW25113 and absent in *E. coli* SL11W447-4 *(*Δ*relA*/Δ*spoT*).** *relA* (~600 bp)and *spoT* (~150 bp)are present in WT, but absent in the Δ*relA*/Δ*spoT* mutant(**A, B**).Nucleotide blast alignment identified amplified sequences as E1A98\_14280 (*relA*) (**C**) and *spoT* (**D**) genes in the *E. coli* BW25113 genome.