



**Figure 1. 5' UTRs are sufficient to lead to bS21-2-mediated changes in translation. (A)** Diagrams of the translational reporter fusions used. Reporters used the *tul4* promoter to drive expression of the tested 5' UTR, including the first 6 codons of the gene, and are in frame with either *lacZ* at the Tn7 site of the genome or *gfp* on a multi-copy plasmid. **(B)** Relative fluorescence for indicated translational fusion reporters in cells with (+; WT) or without (-;  $\Delta rpsU2$ ) bS21-2 in biological triplicate. The *tul4* reporter serves as a control. 5' UTR sequences can be found in Supplemental Table 1. **(C)** Relative  $\beta$ -galactosidase activity for indicated translational fusions in cells with (+; WT) or without (-;  $\Delta rpsU2$ ) native bS21-2, or with ectopically expressed bS21-2 from a multicopy plasmid, pF-nat (pF-bS21-2). Strains without ectopically expressed bS21-2 contained an empty vector (pF). Error bars represent 1 SD. \* $p < 0.05$  by t-test. Experiments were repeated at least twice and data from a representative experiment are shown.