**STEP 1:** Prepare the test promoter φ by annealing synthesized oligos leaving EcoRI and SpeI sticky ends.

**STEP 2:** Prepare the GFP reporter device (BBa_E0240) by miniprep of pSB1A2-E0240 followed by restriction digest with XbaI and PstI.

**STEP 3:** Prepare backbone plasmid (pSB3K3) by preparative PCR of pSB3K3-P1010 using provided primers followed by restriction digest with EcoRI and PstI.

**STEP 4:** Combine the test promoter φ, GFP reporter device, and backbone plasmid in a 3-way ligation to build the promoter test construct.

**STEP 5:** Transform the promoter test construct into TOP10 cells. Select for transformants on Kanamycin plates.

**STEP 6:** Measure the activity of the test promoter φ relative to the activity of the reference standard promoter (BBa_J23101). Report promoter φ activity in relative units of Standard Promoter Units (SPUs).