Growth curve measurement of

L.lactis

Materials: Bacterial culture of *L.lactis* MG1363, GM17 broth (autoclaved), ethanol solution of erythromycin

Instruments: Shaking incubator, NanoDrop 2000 Microvolume Spectrophotometer

Procedure:

1. For *L.lactis* MG1363 containing plasmid pMG36e, add erythromycin in autoclaved GM17 broth to 5μg/ml. For WT *L.lactis*, GM17 is directly used.
2. Pick a single colony of *L.lactis* MG1363 and inoculate it into a 12 ml shke culture tube containing 5 ml GM17 broth.
3. Incubate overnight at 30 ℃, 200 rpm in a shaking incubator.
4. Inoculate fresh GM17 broth with overnight culture at 1:1000.
5. Incubate at 30 ℃, 200 rpm in a shaking incubator. Take 1 ml of the culture every 30 minutes and measure the optical density (OD) at 600 nm with NanoDrop 2000 Spectrophotometer.
6. Plot OD versus time to obtain the growth curve.