

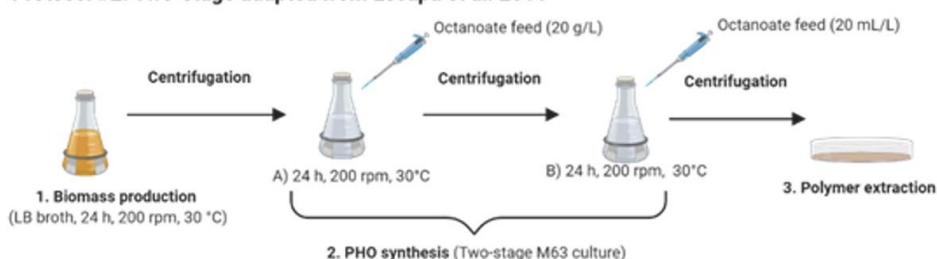
Supplementary Material

Figure S1. Protocols tested to increase the yields of PHO biosynthesized from liquid culture of *P. putida* KT2440.

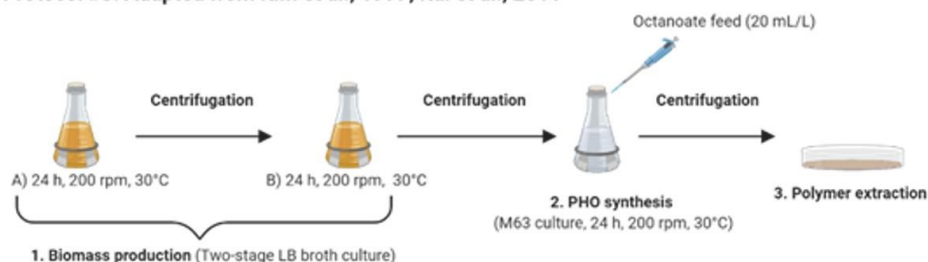
Protocol #1: One-stage adapted from Escapa et al. 2011



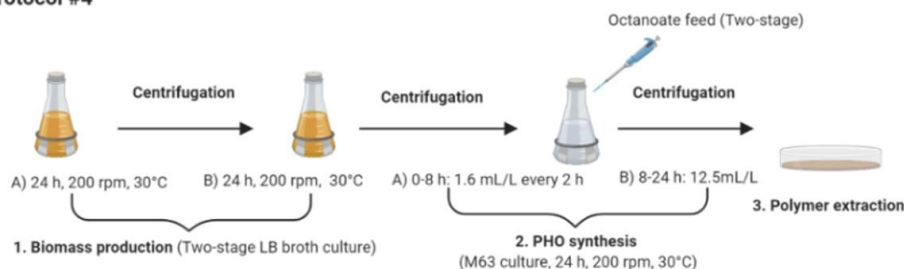
Protocol #2: Two-stage adapted from Escapa et al. 2011



Protocol #3: Adapted from Kim et al., 1997; Rai et al., 2011



Protocol #4



Protocol #5

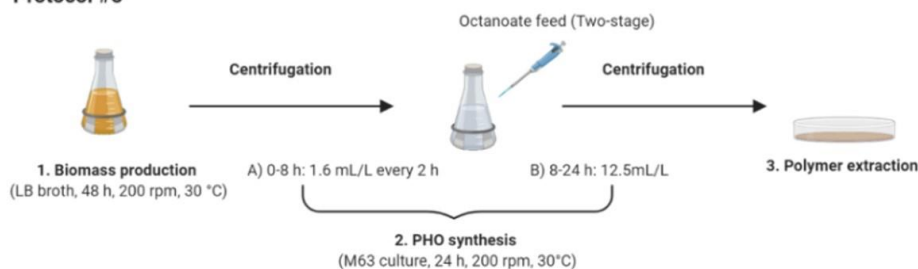


Figure S2. Macroscopic aspect of PHO film obtained from *P. putida* KT2440



Figure S3. FTIR spectra of neat PHO film and active PHO films with different concentrations of metal nanoparticles.

