**Purification of artificial metabolosome proteins**

The proteins of the artificial metabolosomes were purified following the procedure that had previously been described involving a series of differential spins and ultracentrifugation steps (Havemann and Bobik, 2003).

BL21(DE3) was grown in 200 ml of Luria-Bertani medium until $OD_{600}$ of 0.8 when protein production was induced with 1 mM IPTG at 16° C overnight.

The cells were harvested by centrifugation at 4,000 x g at 4 ° C for 10 minutes, resuspended in 10 ml sonication buffer(TEM)* and lysed by sonication (six 30 seconds bursts with 30 seconds cooling intervals on ice at an amplitude of 65%).

Subsequently, insoluble matter was removed by centrifugation at 12,000 x g for 20 min,

Subsequently, insoluble matter was removed by centrifugation at 37,000 x g for 30 min,

The soluble clarified sample was subjected to high-speed centrifugation at 48,000 x g for 90 minutes (Beckman Optima LE-80K, SW-28 rotor).

- Recipient for TEM:
  50 mM Tris-HCl,
  2 mM EDTA,
  0.2% 1,2-PD [pH 8.0]

ref: Protein content of polyhedral organelles involved in coenzyme B12-dependent degradation of 1,2-propanediol in Salmonella enterica serovar Typhimurium LT2. *J Bacteriol.* 2003 Sep;**185**(17):5086-95