

## HISTONE EXTRACTION PROTOCOL

- 1. Harvest cells and wash twice with ice-cold PBS. PBS can be supplemented with 5mM Sodium Butyrate to retain levels of histone acetylation.
- 2. Resuspend cells in Triton Extraction Buffer (TEB: PBS containing 0.5% Triton X 100 (v/v), 2mM phenylmethylsulfonyl fluoride (PMSF), 0.02% (w/v)  $NaN_3$ ) at a cell density of  $10^7$  cells per ml.
- 3. Lyse cells on ice for 10 minutes with gentle stirring.
- 4. Centrifuge at 2000rpm for 10 minutes at 4°C. Remove and discard the supernatant.
- 5. Wash the cells in half the volume of TEB and centrifuge at before.
- 6. Resuspend the pellet in 0.2N HCl at a cell density of 4x10<sup>7</sup> cells per ml.
- 7. Acid extract the histones over night at  $4^{\circ}$ C.
- 8. Centrifuge samples at 2000rpm for 10 minutes at 4°C.
- 9. Removed the supernatant and determine protein content using the Bradford assay.
- 10. Store aliquots at -20 °C.