Acetone Precipitation Protocol

Please first perform a protein assay (Bradford or micro BCA) before doing the precipitation protocol if you have no clue on the amount of proteins in your samples. Also, make sure that your sample buffer is compatible with the protein assay protocol.

Use cleaned tubes that are washed with all solvents used in the following protocol.

1. Cool the required volume of acetone to -20°C.
2. Place protein sample in acetone-compatible tube.
3. Add four times the sample volume of cold (-20°C) acetone to the tube.
4. Vortex tube and incubate for 60 minutes at -20°C.
5. Centrifuge 10 minutes at 13,000-15,000 x *g*.
6. Aspirate the supernatant, being careful to not dislodge the protein pellet.

   If samples contain SDS: additional cycles of precipitation are necessary for a more efficient removal, then repeat steps 2-5 before proceeding to step 7.

7. Allow the acetone to evaporate from the uncapped tube at room temperature for 30 minutes. Do not over-dry pellet, or it may not dissolve properly. (cover the tubes with a clean Kimwipes to avoid dust deposition in tubes).
8. Leave samples dry and send to proteomic core facility or freeze them at -80°C until ready to submit.