

Acetone precipitation of proteins

Adapted from Pierce TR0049.0 www.piercenet.com

Pre-cool a bottle of Acetone in ice or in a 4C cooler prior to start of the procedure

1. Working on wet ice, aliquot the needed volume of your protein solution into a new tube.
2. To this, add 4 Volumes of cold acetone.
3. Incubate this on ice for at least 60min. Depending on the protein concentration it may take longer. After 60min if you do not see protein coming out of solution, allow a longer incubation. Some people like to incubate the samples overnight at -20C and in some cases this may be necessary. You'll need to determine this experimentally.
4. Spin the sample at 14,000xG for 10min and remove the supernatant. There should be a visible protein pellet at the bottom of the tube.
5. Invert the open tube in a fume hood to allow the residual acetone to evaporate. Be careful not to disturb the pellet. Drying should not take longer than 30min and do not allow the pellet to dry longer than 60min or resuspension becomes much more difficult.
6. Store the pellet at -20C until further use.