Sample clean-up: Lipids Sample type: Cell, Tissue, Ascites Method: Detergent & Solvent extraction

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Ionic contaminants such as lipids, detergents, and phenolic compounds interfere with isoelectric focusing of proteins resulting in poor 2-D gel resolution and reproducibility.

Methods to remove lipids sample:

- Detergent: in general, the detergent present in the sample buffer, such as CHAPS, will be sufficient enough to solubilize lipids and prevent interference.
- Solvent extraction/precipitation: acetone precipitation and in rare cases chloroform/methanol extraction will remove lipids and enable subsequent electrophoresis;
 One problem with the use of organic solvents is that the proteins are often precipitated with the solvents, and may be hard or impossible to resolubilize. However, some samples may be best solubilized with an organic solvent.