

Tips for Minimizing Keratin Contamination

1. Keep a Clean Benchtop and Reagents

- Prior to preparing samples for LC-MS, clean your workspace and pipettes with water and methanol.
- Ensure all pipette tips, microcentrifuge tubes and reagents have minimal exposure to the air, especially if you are not working in a hood. This includes both during use and storage.

2. Handle Your Samples with Care

- Avoid handling samples or tubes with bare hands; always wear **clean** gloves.
- Always use freshly cleaned spatulas, razor blades, etc for sample manipulation.
- When opening tubes, aim them away from your face and do not touch the lip inside of the lid with your fingers.

3. Gels

- Commercially purchased, pre-cast gels tend to have fewer contaminants. If you are casting your own gels, make certain your reagents are of highest quality. Wipe gel plates with ethanol and cover if not used immediately.
- Minimize handling of gels and touch only areas of the gel that do not contain protein.
- When staining, use nanopure (milliQ) water and staining boxes that are thoroughly cleaned and rinsed. We recommend the use of dedicated staining boxes and generally find a methanol wash followed by nanopure water to be sufficient for cleaning.
- When imaging a gel you intend to use for LC-MS, place plastic wrap on the imaging screen.
- When excising protein bands or spots, use new or freshly cleaned (new if possible) razor blades. Commercial spot cutters (robotic and manual) are also available. To avoid cross contamination, either use a clean blade for each protein, or rinse blade with methanol and wipe with a paper towel.