Instructions for the preparation of sterile liquid cell culture media from

Silantes SILAC DMEM or SILAC RPMI powder media.

General Information:

For the reconstitution of powder media, water for cell culture or bi-distilled, deionized, pyrogen-free water should be used. It is recommended to dissolve the whole content of a package at once. If only part of the package is used, the residual powder must be stored in the dark at 2-8 °C and under dry conditions because of its highly hygroscopic characteristics. Our powder is weighed out exactly for the given volume. Prepare only 1x liquid media from powder media. The contained amino acids can form difficultly soluble salts in more concentrated solutions and precipitate. Required supplements can be added nonsterile before or sterile after filtration. Please make sure that the used supplements are suited for sterile filtration!

Preparation of sterile filtrated liquid media:

1. Add powdered medium to room temperature bi-distilled water (about 80% of final volume) and dissolve under constant stirring. Rinse the inside of the package to remove all traces of powder and add this to the water.
2. Add sodium bicarbonate and stir until it is completely dissolved. Avoid extensive mixing because this promotes loss of bicarbonate by evolution of CO_2.
3. Check the pH and, when necessary, adjust it by slowly adding 1 N HCl or 1 N NaOH under stirring to about 0.2 units below the desired value. The pH value may rise about 0.1 to 0.3 units because of CO_2 evolution during filtration. This precaution is not necessary if the used powder media contains HEPES or other organic buffers.
4. Add distilled water up to the final volume and filtrate the liquid medium into sterile containers using a 0.22 µm filter.
5. The prepared medium should be stored at 2 -8 °C and protected from light.