DIALYSIS

MATERIALS:

- dialysis tubing cellulose membrane (Sigma D9652)
- Universal closures for CE membranes

PROTOCOL:

Cut a piece of dialysis bag (consider place for up and down closing and for sample, i.e. about 15 cm long for a 3mL sample).
Fill a big bucket (around 1L or bigger) with dialysis liquid.
This can be deionized water or a buffer like PBS. It must be adjusted to avoid too big concentration fluctuation between the liquid the sample.
Rinse the dialysis bag with water to check that it's not leaking.
Close the bottom (fold it 3 times and add the clipper).
Introduce the sample into the dialysis bag with a serological pipette.
The sample should have a minimal volume of about 2 mL, a larger volume is easier to deal with though.
Close the dialysis bag (avoiding bubbles) with the second clipper (same 3 times fold as for the bottom).
Secure the clippers with parafilm.
Add a floating support the sample.
Stir at 300rpm in the bucket containing dialysis liquid.
After 3 hours, change the liquid (in the bucket).
After another 3 hours, change the liquid again.
In some cases, concentration of the dialysis liquid can be adjusted to stay closer to the sample's concentration. Avoid too big differences to prevent the dialysis bag to burst. If you are not certain, the liquid can be changed more often, especially at the beginning, e.g. after 30 min.
Let the dialysis continue overnight.
Open one side of the bag and pipette the sample out with a serological pipette (pipette boy).