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A Geno Technology, Inc. (USA) brand name

# OrgoSol-PROTEIN-Concentrate™

For Protein Precipitation & Subsequent Concentration

(Cat. # 786-125)



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## INTRODUCTION

The OrgoSol PROTEIN Concentrate™ kit is based on precipitation of protein in a proprietary combination of organic solvents. The kit has been specifically developed for efficient precipitation of protein solution with a minimal disruption to the protein structure and thus maintaining biological activity of most proteins. This kit is therefore suitable for concentration of protein solutions where maintaining biological activity is essential. Since proteins have unique structures and properties as well as co-factor requirements for biological activity, it is therefore recommended that a test is run before using this kit.

## APPLICATIONS

A proprietary mix of organic solvents for concentration of biologically active proteins. The kit is suitable for concentration of a total of 5ml protein solution in either single or multiple procedures.

## ITEM(S) SUPPLIED (Cat. # 786-125)

Description	Size
OrgoSol™ Buffer	50ml
SEED	300µl

## STORAGE CONDITIONS

The kit is shipped at ambient temperature. Upon arrival, store at room temperature. OrgoSol™ Buffer can be stored at -20°C as required in the protocol step.

## ADDITIONAL ITEMS REQUIRED

- Refrigerated centrifuge and Centrifuge tubes

## PROTOCOLS

**IMPORTANT NOTE:** *OrgoSol™ Buffer must be chilled to -20°C for at least 1 hour before use. Perform the entire procedure in cold unless specified otherwise.*

1. Transfer 10ml -20°C OrgoSol™ Buffer to a centrifuge tube for every 1ml of protein solution to be concentrated.
2. Transfer the centrifuge tube to a -20°C freezer for 20 minutes.
3. Add 1ml protein solution for every 10ml OrgoSol™ Buffer and immediately invert the tube a few times to mix the contents.
4. Add 5µl SEED and invert the tube a few times to mix.
5. Immediately, transfer the tube to a -20°C freezer and incubate for 3 hours.
6. At the end of the incubation period, centrifuge the tube in a refrigerated centrifuge at 15,000xg for 15 minutes at 1-4°C (or a lower temperature if possible).
7. Immediately after the centrifugation, remove the tube from the centrifuge and decant the supernatant in to a beaker. Be careful to not dislodge the white pellet.
8. Invert the tube on a clean paper towel for 5 seconds and then transfer the tube to an ice bucket.

**NOTE:** *For safe disposal of the OrgoSol™ buffer, mix with 10-volumes of tap water and then discard down the sink.*

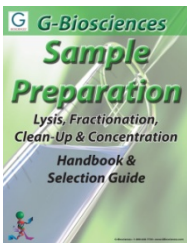
9. Air-dry the pellet for 5-10 minutes, during which time the pellet turns from white to translucent.

**NOTE:** *Do not over dry the pellet as parched dry pellets may be difficult to dissolve.*

10. Resuspend the protein pellet in an appropriate buffer. The buffer must contain all of the components and co-factors necessary for protein solubilization and activity.
11. Incubate the tube in an ice bucket until the protein pellet is fully suspended in solution. Centrifuge the tube for 2 minutes. Transfer the clear protein solution to a clean tube. The protein solution is now ready for use.

## RELATED PRODUCTS

Download our Sample Preparation Handbook.



<http://info.gbiosciences.com/complete-protein-sample-preparation-handbook/>

For other related products, visit our website at [www.GBiosciences.com](http://www.GBiosciences.com) or contact us.

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