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A Geno Technology, Inc. (USA) brand name

# PCA Deproteinization Kit

(Cat. # BAQ108, BAQ109, BAQ110)



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## INTRODUCTION

Proteins may interfere with some assays, affecting accuracy and sensitivity. Chemical alternatives for removal of proteins are better option when ultrafiltration is not possible.

G-Biosciences PCA (Perchloric acid) Deproteinization Kit ensures a protein removal efficiency over 99 % with very low sample dilution that includes a neutralizing solution to adjust the pH.

## ITEM(S) SUPPLIED

Description	100 samples* (BAQ108)	200 samples (BAQ109)	400 samples (BAQ110)
PCA Solution	3.2 ml	6.4 ml	12.8 ml
PCA Neutralizing Solution	18 ml	36 ml	72 ml

\* The number of samples refer to an individual sample with volume of 90  $\mu$ l.

## STORAGE CONDITIONS

This kit is shipped at ambient temperature. Store all the reagents as indicated on the labels. If stored and used as directed this kit is stable for 12 months.

## ADDITIONAL ITEMS REQUIRED

- 1.5ml microfuge tubes

## RECOMMENDED USES

For the deproteinization of samples prior to assaying small molecules such as glutathione, ATP, cAMP, glycogen and antioxidants etc. It is not compatible with organic solvents as these leave salt precipitates.

## PROTOCOL

1. Place the PCA Solutions and Neutralizing solution on ice to ensure they are cold before use.
2. Add sample and PCA in a microfuge tube in ratio 3:1. For example: To 90  $\mu$ l of sample, add 30  $\mu$ l of PCA solution.
3. Briefly vortex to mix.
4. Incubate the tube/tubes on ice for 15 minutes.
5. Centrifuge the tubes at 10,000 g for 10 minutes at 4°C.
6. Collect the supernatant in a fresh microfuge tube.

7. Add neutralizing solution at a volume equal to 35 % of the supernatant recovered volume. For example: 17.5 µl neutralizing solution per 50 µl of sample.  
**NOTE:** Vent sample tube as there may be formation of CO<sub>2</sub>.  
**NOTE:** Check that the pH is neutral with a pH paper test. If necessary, adjust with the neutralizing solution.
8. Place the sample on ice for 5 minutes.
9. Centrifuge the sample tube at 10,000 g for 15 minutes at 4°C.
10. Collect the supernatant in a fresh microfuge tube. Assay the sample immediately or store at -80°C for later use.

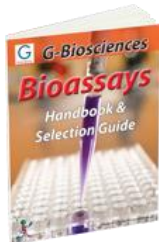
## DATA ANALYSIS

The sample is diluted by this process. To calculate the dilution factor, apply the following formula:

$$\% \text{ final sample} = \frac{\text{Initial sample volume}}{\text{Initial sample volume} + \text{Volume of PCA Solution} + \text{Volume of neutralization solution}}$$

## RELATED PRODUCTS

Download our Bioassays Handbook.



<http://info2.gbiosciences.com/complete-bioassay-handbook>

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





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