

PCA DEPROTEINIZING KIT

KB03027

INTRODUCTION

Proteins may interfere with some assays, affecting accuracy and sensitivity. When ultrafiltration cannot be done, other chemical removal alternatives can be considered.

The BQckit PCA deproteinizing kit ensures a protein removal efficiency over 99.3 % with very low sample dilution that includes a neutralizing solution to adjust the pH.

COMPONENTS

Component	N° samples*	Amount
PCA solution	100	3.2 ml
	200	6.4 ml
	400	12.8 ml
Neutralizing solution	100	18 ml
	200	36 ml
	400	72 ml


*The number of samples refer to an individual required volume of 90 µl per sample.

Storage: Room temperature.
 Stable for: 1 year

RECOMMENDED USES

For the deproteinization of samples prior to assaying small molecules, glycogen, ATP, cAMP, glutathione and antioxidants. Not compatible with organic solvents, which will leave salt precipitates.

SHORT PROTOCOL

1	10 min	Place the solutions on ice to ensure they are cold
2		In a microtube mix your sample with the PCA solution in a 3:1 ratio. For example: 90 µl of sample with 30 µl of PCA solution.
3	1 min	Vortex
4	15 min	Keep microtubes n ice
5	10 min	Centrifuge at 10 000 xg at 4°C
6		Collect supernatant in other microtube
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
8		Check that the pH is neutral with a pH paper test. If necessary, adjust with the neutralizing solution.
	ATTENTION	Vent sample tube as there may be formation of CO ₂ .
9	5 min	Place on ice
10	15 min	Centrifuge at 10000 xg at 4°C
11		Collect supernatant
12		Assay directly or freeze at -80°C until the day of the assay



DATA ANALYSIS

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

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

