

PROTEIN CONCENTRATION KIT

KB03031

INTRODUCTION

Concentration of the protein present in a sample is necessary for some laboratory protocols. It also adds the advantage of removing other potential interfering substances like salts and detergents.

The BQckit Protein concentration kit ensures the highest protein recovery and is adapted for higher and lower initial concentrations.

COMPONENTS

Component	n° samples*	Amount
Reagent A- DOC Solution	100	10 ml
	200	20 ml
	400	40 ml
Reagent B- TCA solution	100	10 ml
	200	20 ml
	400	40 ml
Reagent C- Acetone	100	50 ml
	200	100 ml
	400	200 ml
Reagent D- Tris Buffer pH 8	100	5 ml
	200	10 ml
	400	20 ml

*The number of samples refer to an individual required volume of 1 ml per sample either with high or low concentration of protein.

Storage: Room temperature
 Stable for: 1 year

RECOMMENDED USES

The protein concentrates can be used for several applications, including Western blot, SDS-PAGE or 2D-gels. Do not use the concentrates for the measurement of biochemical activity, the proteins will be denatured after this protocol.

SHORT PROTOCOL

For samples with a concentration **higher than 5 µg/ml** follow the protocol below:

1	10 min	Place the solutions on ice to ensure they are cold
2		Add 100 µl of Reagent B to 1 ml of the sample.
3	1 min	Vortex
4	30 min	Keep microtubes on ice
5	5-15 min	Centrifuge at 10 000 xg at 4°C
6		Remove supernatant. Take care not to disrupt the pellet. OPTIONAL:
		<ul style="list-style-type: none"> Wash the pellet with 500 µl of ice-cold Reagent C. Centrifuge at 10 000 xg at 4°C for 5 min Remove the supernatant. Repeat several times. Air-dry pellet.
7		
8		Resuspend the sample in 50 µl of the desired buffer..
9		Check the pH with a strip and adjust if necessary to pH 7 with Reagent D.
10		Proceed to analyze this sample as usual

For samples with a concentration **lower than 1 µg/ml** follow the protocol below:

1	10 min	Place the solutions on ice to ensure they are cold
2		Add 100 µl of Reagent A to 1 ml of the sample.
3	1 min	Vortex
	10 min	Incubate at room temperature
		Add 50 µl of Reagent B
	1 min	Vortex
4	30 min	Keep microtubes on ice
5	5-15 min	Centrifuge at 10 000 xg at 4°C



6 Remove supernatant. Take care not to disrupt the pellet.

7 **OPTIONAL:**

- Wash the pellet with 500 μ l of ice-cold Reagent C
- Centrifuge at 10 000 xg at 4°C for 5 min
- Remove the supernatant.
- Repeat several times.
- Air-dry pellet.

8 Resuspend the sample in 50 μ l of the desired buffer

9 Check the pH with a strip and adjust if necessary to pH 7 with Reagent D.

10 Proceed to analyze this sample as usual

