Antibody Concentration Kit ab102778

Overview

**Product name**
Antibody Concentration Kit

**Product overview**
Antibody Concentration Kit ab102778 allows for the quick and easy concentration of antibodies and proteins using a microcentrifuge-based method. The kit can also be used to reduce the concentration of many unwanted additives often found in antibody formulations such as azide, glycine or tris.

Antibodies are sometimes only available at low concentrations and often contain low molecular weight substances that interfere in labeling reactions with enzymes, biotin, streptavidin and fluorophores. ab102778 can be used to avoid the impact of this.

The Antibody Concentration Kit method utilizes a simple spin column to easily and quickly remove excess buffer from the antibody thereby providing a more concentrated antibody solution. The Antibody Concentration Kit also allows the experimenter to perform a simple buffer exchange to transfer the antibody.

The components of Ab102778 are fully compatible with our Antibody conjugation kits however they are not compatible with our GOLD Antibody conjugation kits. To concentrate antibodies for use with our GOLD conjugation kits, please use our Gold antibody concentration kit (ab204911).

**Notes**
This product is manufactured by Expedge, an Abcam company, and was previously called AbSelect™ Antibody Concentration and Clean-Up Kit. 861-0010 is the same as the 3 uunits size.

**Concentration of Antibody Solution**

1. Add up to 0.5ml antibody to spin cartridge.
2. Spin for 1 to 3 minutes* in a microfuge at max speed of 15000g to reduce the buffer volume in the spin cartridge to between 50 and 100ul. It is advisable not to spin the antibody dry as reconstitution of the antibody will be difficult and significant antibody loss and degradation may occur.
3. Repeat steps 1 to 2 as many times as is necessary to process the entire antibody to the desired concentration. It may be necessary to discard the excess buffer collected in the collection tube between spins.
4. Recover the concentrated antibody from the spin cartridge. NB. It is advisable not spin the antibody dry as reconstitution of the antibody will be difficult and significant antibody loss and degradation may occur.

**Buffer Exchange Using Spin Column Assembly**

1. Add up to 0.5ml antibody to spin cartridge.
2. Spin for 1 to 3 minutes* in a microfuge at maximum speed to reduce the buffer volume to 100ul.
3.Discard the excess liquid in collection tube.
4. Add 400ul conjugation buffer to the antibody in the spin cartridge.
5. Spin for 1 to 3 minutes* in a microfuge at maximum speed to reduce buffer volume to 100ul.
6. Discard the excess liquid in collection tube.
7. Repeat steps 4 to 6 at least 5 times to exchange antibody buffer.
8. Recover antibody from the spin cartridge.

*Spin times will vary depending on buffer composition, starting volume and centrifuge speed.

**Note** Each cycle leads to a reduction in the concentration of low molecular substances. By performing as many as 5 repeat steps the concentration of small molecules such as glycine and Tris will be reduced 2500 fold. However, the concentration of proteins such as BSA will be unchanged.

To remove unwanted proteins see ab102784.

**Storage of Antibody**

Store at 4°C. Other storage conditions (e.g. frozen at -70°C may also be satisfactory). The sensitivity of any particular antibody to freeze thaw should be determined by experimentation on small aliquots.

**Test for Protein**

Wherever possible protein values should be determined using an absorbance at 280nm. For an IgG using a 1cm light path an OD280 of 1.0 is equal to an antibody concentration 0.714mg/ml. When using Bradford type reagents, it is important to use an IgG standard curve. The absorbance generated by this type of reagent is dependent on the protein used. For example using a BSA standard curve to determine the protein concentration of an IgG solution will result in a two fold under estimate of the IgG concentration.

**Properties**

**Storage instructions**  Store at +4°C. Please refer to protocols.

<table>
<thead>
<tr>
<th>Components</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conjugation Buffer</td>
<td>1 unit</td>
</tr>
<tr>
<td>Spin Cartridge/ Collecting tube assembly</td>
<td>3 units</td>
</tr>
</tbody>
</table>

**Images**
Representative Antibody Concentration Kit (3 columns) (ab102778).

Please note: All products are “FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES”

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