Serum Antibody Purification Kit (Protein G) **ab128751**

**Overview**

<table>
<thead>
<tr>
<th>Product name</th>
<th>Serum Antibody Purification Kit (Protein G)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample type</td>
<td>Serum</td>
</tr>
<tr>
<td>Product overview</td>
<td>Protein G has a high affinity for the Fc regions of IgG molecules from a variety of species. ab128751 G Serum resin is prepared by coupling purified Protein G to agarose beads. It can therefore be used to purify IgG fractions from both serum and ascites fluid. The antibody is captured on the AbSelect G resin and unwanted substances are removed by a simple wash procedure. Up to 10mg of antibody can be purified in each run. The volume of sample required will depend on the host species.</td>
</tr>
</tbody>
</table>

The purified product is then eluted and neutralized.

The components of ab128751 are fully compatible with our Conjugation kits however they are not compatible with our GOLD Antibody conjugation kits. To purify antibodies for use with our GOLD conjugation kits, please use Gold antibody purification kit (ab204909).

**Notes**

This product is manufactured by Expedeon, an Abcam company, and was previously called AbSelect™ G Serum Antibody Purification System. 893-0030 is the same as the 1 test size. 893-0500 is the same as the 3 tests size.

**Protocol**

**Overview of procedure**

Step 1: Prepare the serum or ascites fluid.
Step 2: Transfer the Protein G resin to the prepared sample and mix for 2 hours.
Step 3: Transfer the solution into the column.
Step 4: Wash the Protein G resin.
Step 5: Elute and neutralize purified antibody.
Step 6: Confirm antibody is in eluate using a test for protein.
Step 7: Concentrate the antibody (optional).

**1. Preparing the Serum or Ascites fluid**

Add the 10x Binding Buffer to the serum or ascites fluid. The volume to add is 1/10 of the volume of the sample. For example, for 5ml of serum add 0.5ml of the Binding Buffer. Mix by inversion.

**Note:** For sample volumes of less than 5ml, dilute the sample with Wash Buffer to 5ml before adding the Binding Buffer.

**2. Incubation of Sample with Resin**

Add the resin to the supernatant and incubate with mixing at room temperature for a minimum of 2 hours. Use the sample to rinse the bottle to recover all the resin.
3. Packing of the column
Carefully pour the sample-resin mix into the column. Sample volumes of more than 10ml will have to be added in aliquots. The resin will collect in the bottom of the column. The unwanted supernatant will pass through the column and can be kept on ice until a successful outcome has been confirmed.

Note: Up to 10mg of antibody can be purified in each run. The volume of sample required will depend on the host species.

4. Wash procedure
Wash the column with 7ml of Wash Buffer to remove any non-bound protein. Repeat the wash procedure three times.

Note: Wash the inner surface of the column to remove any residual starting material.

5. Elution
The antibody is eluted in 1ml fractions. Place a collecting tube under the column and add 1ml of Elution Buffer (see below). Remove the collection tube and add 0.25ml of Neutralization Buffer. Cap the tube and place to one side. Repeat the elution process three more times, each time neutralizing the sample as it is eluted.

Note: The Neutralization Buffer must be added as soon as possible to avoid prolonged exposure to low pH which can result in denaturation of the IgG. The protein normally elutes in tubes 1 and 2 but you should confirm this using a test for protein before pooling any of the tubes.

Storage of Antibody
Store at 4°C. Other storage conditions (e.g. frozen at -80°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.

When other methods are used such as BCA or Bradford protein assays, determinations should be performed before the addition of the neutralization buffer. The neutralization buffer contains components that can interfere with these reagents. The neutralization buffer should be added to the sample as soon as possible as the low pH of the elution buffer can denature the antibody.

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

<table>
<thead>
<tr>
<th>Storage instructions</th>
<th>Store at +4°C. Please refer to protocols.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>1 tests</th>
<th>3 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>10x Binding Buffer</td>
<td>1 vial</td>
<td>1 vial</td>
</tr>
<tr>
<td>Elution Buffer</td>
<td>1 vial</td>
<td>1 vial</td>
</tr>
<tr>
<td>Neutralizer Buffer</td>
<td>1 vial</td>
<td>1 vial</td>
</tr>
<tr>
<td>Purification Column</td>
<td>1 unit</td>
<td>1 x 3 units</td>
</tr>
<tr>
<td>Components</td>
<td>1 tests</td>
<td>3 tests</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Serum Protein G Resin</td>
<td>1 vial</td>
<td>1 x 3 vials</td>
</tr>
<tr>
<td>Wash Buffer</td>
<td>1 vial</td>
<td>1 vial</td>
</tr>
</tbody>
</table>

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors