Qty: 5 ml
Protein A-Sepharose® 4B Conjugate
Catalog No. 10-1041
Lot No.

PROTEIN A-SEPHAROSE® 4B CONJUGATE

FORM
This product is supplied as a 50% suspension (5 ml Protein A-Sepharose® 4B + 5 ml PBS) in 10 mM phosphate-buffered saline, pH 7.4, containing 0.1% Proclin as a preservative. The product is prepared by covalently coupling highly purified (>98% by SDS-PAGE) Staph. Aureus Cowan strain 1 Protein A to Sepharose® 4B.

DESCRIPTION:
Protein A and Protein G bind specifically to Fc regions of many mammalian immunoglobulins. Protein A and Protein G conjugates are commonly used as affinity adsorbents to purify immunoglobulins (antibodies) and immunoglobulin subtypes from serum, hybridoma ascites fluids, tissue culture supernatants, and other biological fluids. These reagents are also commonly used to capture immune complexes generated in immunoprecipitation experiments. Because Protein A and Protein G vary widely in their abilities to bind individual immunoglobulins, consult the table below before proceeding with your application. It should be noted that the Fc binding characteristics of naturally produced Protein A and Protein G are identical to their recombinant counterparts. However, also note that Invitrogen’s recombinant Protein G products are deleted for two albumin binding sites present in the wild type molecule. For certain procedures, it may be advantageous to use a light chain binding reagent (e.g. Invitrogen’s Kappalock™ products) instead of Protein A or Protein G.

SPECIFICATIONS
- Protein-A/Sepharose® ratio: ~2.7 mg Protein A per ml beads
- Binding capacity: ~22 mg Rabbit IgG per ml beads
- Protein A Molecular Weight: 42 kDa (native)
- Protein A Ig Binding Sites: 4 per molecule
- Albumin Binding Sites/molecule: none

<table>
<thead>
<tr>
<th>Species</th>
<th>Protein A</th>
<th>Protein G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat IgG</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>Chicken IgG</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cow IgG</td>
<td>+</td>
<td>+++</td>
</tr>
<tr>
<td>Cow IgG1</td>
<td>+</td>
<td>+++</td>
</tr>
<tr>
<td>Cow IgG2</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Dog IgG</td>
<td>++</td>
<td>+</td>
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<tr>
<td>Goat IgG</td>
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<tr>
<td>Goat IgG1</td>
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<tr>
<td>Goat IgG2</td>
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<td>Guinea Pig IgG</td>
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<td>+</td>
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<tr>
<td>Hamster IgG</td>
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<td>++</td>
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<tr>
<td>Horse IgG</td>
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<td>+++</td>
</tr>
<tr>
<td>Human IgA</td>
<td>+</td>
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<tr>
<td>Human IgA1</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Mouse IgG</td>
<td>++</td>
<td>+</td>
</tr>
</tbody>
</table>

+++; ++, +, --: strong binding, moderate binding, weak binding, no binding, respectively.

(Cont'd)
PROCEDURES:
Recommended procedures for immunoglobulin affinity purification and immunoprecipitation using our Protein A and Protein G products are available on our Web site at www.invitrogen.com/methods. Hard copy is available on request from Invitrogen Technical Services by phone at 800.955.6288 or by email at tech_support@invitrogen.com. An excellent source for information on antibodies in general and on nearly all routine laboratory procedures involving antibodies is Antibodies, A Laboratory Manual, Ed Harlow and David Lane, Eds., Cold Spring Harbor Laboratory (1999).

STORAGE:
Store at 2-8°C. Do Not Freeze. Freezing this product will damage or destroy its performance.

SELECTED INVITROGEN PRODUCT REFERENCES

**Immunoprecipitation**

**Affinity Purification**

RELATED PRODUCTS

<table>
<thead>
<tr>
<th>Product</th>
<th>Cat. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein A-Sepharose® (25 ml)</td>
<td>10-1042</td>
</tr>
<tr>
<td>Rec-Protein A-Sepharose® (5 ml)</td>
<td>10-1141</td>
</tr>
<tr>
<td>Rec-Protein A-Sepharose® (25 ml)</td>
<td>10-1142</td>
</tr>
<tr>
<td>MonoAb rec-Protein A Column Kit</td>
<td>10-1160</td>
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<tr>
<td>Zysorbin™ (fixed, killed Protein A-bearing <em>Staph. aureus</em> for IP, 10 ml)</td>
<td>10-1051-1</td>
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<tr>
<td>Zysorbin™ (fixed, killed Protein A-bearing <em>Staph. aureus</em> for IP, 100 ml)</td>
<td>10-1051-3</td>
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<tr>
<td>Rec-Protein G-Sepharose® (2 ml)</td>
<td>10-1241</td>
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<tr>
<td>Rec-Protein G-Sepharose® (5 ml)</td>
<td>10-1242</td>
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<tr>
<td>Zysorbin-G (fixed, killed Protein G-bearing <em>Streptococci</em> for IP, 10 ml)</td>
<td>10-1352</td>
</tr>
<tr>
<td>Kappalock™-Sepharose (binds to mammalian kappa light chains, 2 ml)</td>
<td>10-1841</td>
</tr>
</tbody>
</table>

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WARRANTY
Invitrogen products are warranted to perform as stated for the recommended applications. This warranty is valid until the expiration date printed on the bottle.

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