For Research

ProteinExpress

# Affinity resin for antibody purification

## Instruction Manual (Version 1)

| | |
|---|---|
| Bipo Resin Protein A (Alkaline Resistance) | Code; AAR-025 |
| Bipo Resin Protein A (Weak Acid) | Code; AWA-025 |
| Bipo Resin Protein L (Alkaline Resistance) | Code; LAR-025 |
| Bipo Resin Protein G (Alkaline Resistance) | Code; GAR-025 |

For research purposes only.
Before using this product, please read carefully this instruction manual.

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# Resins for antibody purification

## 1. Introduction

Protein A (*Staphylococcus aureus*), Protein L (*Finegoldia magna*), Protein G (group G streptococci) are known as affinity molecules to antibodies. We developed affinity resin for antibody purification using these affinity molecules.

| Product name | Note | maximum binding capacity (mg/mL-resin) |
|---|---|---|
| Bipo Resin Protein A (Alkaline Resistance) | Alkaline Resistance | 28（human IgG） |
| Bipo Resin Protein A (Weak Acid) | mild elution (pH3.5-4.5) | 31（human IgG） |
| Bipo Resin Protein L (Alkaline Resistance) | Alkaline Resistance | 13（human IgG）<br>1.2（scFv） |
| Bipo Resin Protein G (Alkaline Resistance) | Alkaline Resistance | 26（human IgG） |

## 2. Product information

Use for purification of antibodies, small molecule antibodies (Fab, scFv), and immunoprecipitation.

25mL resin in 20% EtOH (50% slurry) (average particle size； 60μm)

Storage at 4℃

## 3. Antibody Purification Procedure

<Additional materials required>

- Empty spin column
- Binding buffer (PBS)
- Elution buffer (0.1M Glycine, pH2.5)*
- Neutralization buffer (1.0M Tris, pH9)

*In the case of Bipo Resin ProteinA(Weak Acid), you can use 0.1 M citrate, pH3.5-4.5 as an elution buffer.

1) Equilibrate the resin

Transfer resin (100μL) to empty column (column volume; 500μL). Centrifuge (3,000xg,

1min.) and discard the eluate. Add deionized water (400μL) to the column and centrifuge twice. Add PBS (400μL) to the column and centrifuge twice.

2) Purification

Transfer sample to column and incubate for 5min at room temperature and centrifuge. Add PBS (400μL) to the column and centrifuge three times. Add elution buffer (100μL) to the column and for 1-2min at room temperature and centrifuge twice. Add 5μL of neutralization buffer to each eluate.

**4. Clean-up the resin**

Resins can be clean up by described conditions.

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|---|---|---|
| Bipo Resin Protein A（Alkaline Resistance） | 100 mM NaOH、 | 10min. |
| Bipo Resin Protein A（Weak Acid） | 100 mM NaOH、 | 10min. |
| Bipo Resin Protein L（Alkaline Resistance） | 15 mM NaOH、 | 10min. |
| Bipo Resin Protein G（Alkaline Resistance） | 50 mM NaOH、 | 10min. |

Note)After clean up, NaOH is replaced to deionized water and 20% EtOH immediately. And store at 4℃.

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