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Product No. 17088

Arg-Antibody Elution Buffer (pH4.0)

Features

- Enable to elute antibodies from Protein A column under mild pH (pH 4.0), reducing potential risk of acid denaturation and subsequent aggregation.
- No impact on the preceding processes of antibody purification, e.g., the loading and washing steps.

Protocol

I) Purification of antibody on Protein-A column

1. Equilibrate a Protein-A column with an appropriate binding buffer (neutral pH).
2. Load a sample expressing antibodies.
3. Wash the column with an appropriate washing buffer (neutral pH).
4. Elute the antibody with 5 to 10 column volumes of Arg-Antibody Elution Buffer (pH4.0).
   * If necessary, desalt it by gel-filtration or dialysis.

II) Further purification of the eluted antibody on a cation exchange column

1. Equilibrate a cation exchange column with acetate buffer.
   The pH of the acetate buffer should be determined by the PI value of the antibody.
2. Dilute the above eluted antibody with 2 to 3 volumes of acetate buffer.
3. Load diluted antibody.
4. Wash the column with the acetate buffer.
   * The components of Arg-Antibody Elution Buffer are completely washed out in this process.
5. Elute antibody using high salt concentration, pH changes, or combination of both.

Caution

Use promptly after opening. This product is filtered but no preservative is used.

Storage

Room temperature (Refrigerate after opening)

Expiration

Expiration date is stated on the product label.

Packing

500 mL (Product No.17088-15)

Reference

1. Elution of antibodies from Protein-A column by aqueous arginine solution. *Protein Expression and Purification* **36**(2), 244-248 (2004).
2. Effective elution of antibodies by arginine and arginine derivatives in affinity column chromatography. *Analytical Biochemistry* **345**(2), 250-257 (2005).
3. Role of arginine in protein refolding, solubilization, and purification. *Biotechnology Progress* **20**(5), 1301-1308 (2004)
4. Screening of effective column rinse solvent for Protein-A chromatography. *Protein Expression and Purification* **70**(2), 218-223 (2010)

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