

# LigaTrap® Rabbit IgG Loose Resin Protocol

## Introduction

LigaTrap® Rabbit IgG Purification Resin is engineered to purify high quality Rabbit IgG antibodies from polyclonal and monoclonal sources. LigaTrap® Rabbit IgG Prepacked Columns are capable of binding  $\geq 25\text{mg}$  Rabbit IgG /ml Resin. Kappa and Lambda IgG can be purified using this product.

## Chromatographic Buffers:

| Part #    | Name  | Composition   |
|-----------|---|---|
| BU-131-FP | <b>LigaTrap Sample Diluent 2.0</b>            | 50mg/ml Adipic Acid, 4.0M NaCl, pH 5.8                        |
| BU-132-FP | <b>LigaTrap Equilibration/Wash Buffer 2.0</b> | 10mg/ml Adipic Acid, 800mM NaCl, pH 5.8                       |
| BU-123-FP | <b>LigaTrap Elution Buffer</b>                | 0.1M Sodium Acetate, pH 4.0                                   |
| BU-124-FP | <b>LigaTrap Regeneration Buffer</b>           | 0.1M Glycine, pH 2.5  |
| BU-125-FP | <b>LigaTrap Neutralization Buffer</b>         | 3.0M Tris-Base, pH 11.1                                       |
| BU-126-FP | <b>LigaTrap Storage Buffer</b>                | 10mM Sodium Phosphate, 0.15M NaCl, 0.05% Sodium Azide, pH 7.2 |

**Note:** Adipic Acid can be purchased from Sigma (A26357-500G)

**Note:** **Adipic Acid is insoluble at low pH.** It will solubilize as the pH increases to  $> 5.0$ . For example, after adding all components of LigaTrap Sample Diluent 2.0 Buffer, a 500ml batch will require  $\sim 60\text{mL}$  of 5N NaOH to begin dissolving the adipic acid. Continue to titrate with NaOH until a final pH of 5.8 is achieved. Then QS to the desired volume.

**Note:** For best results, **titrate LigaTrap® Elution Buffer with Glacial Acetic Acid**

**Note:** To limit precipitation of Tris-Base, **store LigaTrap Neutralization Buffer at room temperature.**

## Prepare Sample For Binding:

1. Add the **LigaTrap Sample Diluent 2.0** to the sample containing IgG at a ratio of 1:4  
(For example: Add 2ml LigaTrap Sample Diluent 2.0 to 8ml of sample, or 200ml to 800ml of sample, etc...)

## Chromatographic Protocol:

- Pack the appropriately sized column volume (CV), for your particular application.
  - Recommend 5-minute residence times for the Sample Load and all other chromatographic steps
1. Equilibrate the resin with 10CV of **LigaTrap Equilibration/Wash Buffer 2.0 (BU-132-FP)**
  2. Load the "prepared" sample (described above)
  3. Wash the resin with 10-15CV of **LigaTrap Equilibration/Wash Buffer 2.0 (BU-132-FP)**
  4. Elute bound antibody with 10 CV of **LigaTrap Elution Buffer (BU-123-FP)**. Note, for higher concentration antibody elute with 5 CV, but if higher yields are desired, use 10 CV. Neutralize with 12% v/v of **LigaTrap Neutralization Buffer**.
  5. Regenerate the column with 10CV of **LigaTrap Regeneration Buffer (BU-124-FP)**
  6. Re-Equilibrate the resin with 10CV **LigaTrap Equilibration/Wash Buffer 2.0 (BU-132-FP)** if an additional purification cycle will be done.

7. If purification is complete, store the resin by running 5CV of **LigaTrap Storage Buffer (BU-126-FP)** over the column

### **Other LigaTrap® Products**

| Target Species | Isotype | Part Number                                  |                 |                              |
|----------------|---------|--|-----------------|------------------------------|
|                |         | Prepacked Columns                            | 5mL Loose Resin | Purification Spin Column Kit |
| Human          | IgG     | LT-095-1x1ml<br>LT-095-3x1ml<br>LT-095-1x5ml | LT-095          | LT-095KIT                    |
|                | IgM     | LT-143-1x1ml<br>LT-143-3x1ml<br>LT-143-1x5ml | LT-143          | LT-143KIT                    |
|                | IgA     | LT-146-1x1ml<br>LT-146-3x1ml<br>LT-146-1x5ml | LT-146          | LT-146KIT                    |
| Mouse          | IgG     | LT-137-1x1ml<br>LT-137-3x1ml<br>LT-137-1x5ml | LT-137          | LT-137KIT                    |
|                | IgM     | LT-145-1x1ml<br>LT-145-3x1ml<br>LT-145-1x5ml | LT-145          | LT-145KIT                    |
| Rat            | IgG     | LT-138-1x1ml<br>LT-138-3x1ml<br>LT-138-1x5ml | LT-138          | LT-138KIT                    |
|                | IgM     | LT-147-1x1ml<br>LT-147-3x1ml<br>LT-147-1x5ml | LT-147          | LT-147KIT                    |
| Sheep          | IgG     | LT-141-1x1ml<br>LT-141-3x1ml<br>LT-141-1x5ml | LT-141          | LT-141KIT                    |
| Llama          | IgG     | LT-144-1x1ml<br>LT-144-3x1ml<br>LT-144-1x5ml | LT-144          | LT-144KIT                    |
| Goat           | IgG     | LT-136-1x1ml<br>LT-136-3x1ml<br>LT-136-1x5ml | LT-136          | LT-136KIT                    |
| Rabbit         | IgG     | LT-139-1x1ml<br>LT-139-3x1ml<br>LT-139-1x5ml | LT-139          | LT-139KIT                    |
| Chicken        | IgY     | LT-142-1x1ml<br>LT-142-3x1ml<br>LT-142-1x5ml | LT-142          | LT-142KIT                    |

For further product information please visit our website at [LigaTrap.com](http://LigaTrap.com). For technical support and questions email us at [techsupport@ligatrap.com](mailto:techsupport@ligatrap.com)