

LigATrap™ Llama IgG Purification Kit, 10 x 0.10 mL

Part # *LT-144KIT*

Kit Contents

Part #	Item	Quantity
LT-144-SC	Microspin Columns - centrifuge columns supplied with caps and plug. Each column contains 0.10 mL LigATrap™ Llama Resin in PBS buffer with 0.05% sodium azide.	10
BU-131-FP	LT Sample Diluent 2.0	15 mL
BU-132-FP	LT Equilibration/Wash Buffer 2.0	250 mL
BU-123-FP	LT Elution Buffer	125 mL
BU-124-FP	LT Regeneration Buffer	50 mL
BU-125-FP	LT Neutralization Buffer	15 mL
BU-126-FP	LT Storage Buffer	50 mL
PL-057	2 mL Collection Tubes	80

Introduction

ImmunoReagents is now offering LigATrap™ purification resins and kits, engineered for antibody purification. LigATrap™ Technologies has developed a novel, patented, series of affinity ligands specific for the purification of monoclonal and polyclonal immunoglobulins from various species. In addition to species-specific ligands, advantages include the ability to elute antibodies at a higher pH (pH 4.0) than protein A and G (pH ≤ 3.0), thus reducing the potential for precipitation and inactivation of pH sensitive antibodies.

LigATrap™ Llama IgG Resin is engineered to purify high quality llama IgG antibodies from recombinant, monoclonal, and polyclonal sources. Binding capacity for llama IgG is >15 mg/ml resin. The **LigATrap™ Llama IgG Purification Kit** provides all the necessary reagents for fast, convenient micro-scale purification of llama IgG in just 10 easy steps. Each kit contains 10 microspin columns prefilled with 0.10 ml of **LigATrap™ Llama IgG Resin**, buffers, and collection tubes. Each spin column can be used, regenerated, and used up to 10 times with minimal loss in binding capacity.

Additional Materials Required

- Microcentrifuge set between 2000-6000 x g
- Vortex/Mixer
- Centrifuge tubes or container for sample preparations

Antibody Purification Procedure

Sample Prep

1. In a separate tube (not supplied in kit) add 400µl of sample matrix (i.e. serum or cell culture media) containing llama IgG
2. Add 100µl of **LT Sample Diluent 2.0** to the sample. Mix briefly by vortexing.

Purification

3. Equilibrate resin by adding 400µl of **LT Equilibration/Wash Buffer 2.0**. Snap the bottom plug on the Microspin column. Save the plug, as it will be needed to stopper the column. Insert the Microspin column into a supplied 2.0 mL Collection Tube. Centrifuge between 2000-6000 x g for 1 minute. Empty the buffer from Collection Tube. Repeat with an additional 400µl equilibration. Insert the bottom plug into the Microspin column.
4. Transfer 400µl of prepared sample (Step # 2) to the equilibrated column. Place screw cap on snugly. Vortex briefly for 15 seconds. Continue to mix/shake the sample and resin continuously for ~10 min.
5. Remove plug and insert the Microspin column into a Collection Tube. Centrifuge between 2000-6000 x g for 1 minute. Discard unbound material or retain for further evaluation.
6. Add 400µl of the **LT Equilibration/Wash Buffer 2.0**. Remove plug and insert Microspin column into a clean Collection Tube. Centrifuge between 2000-6000 x g for 1 minute. Discard wash. Repeat with two additional washes for a total of three washes. (3x400µl)

**IR-Tip: Collection Tubes used to collect washes can be reused.*

7. Insert the washed Microspin column into a **new, labeled** Collection Tube. Add 400µl of **LT Elution Buffer** to the column. Vortex briefly for 15 seconds. Centrifuge between 2000-6000 x g for 1 minute. Place the Microspin column into a new, labeled Collection Tube. Repeat with second 400µl elution. ***Note: The eluates contain the purified antibodies. Do not discard!**
8. Pool eluates from Step 7 and add 100µl of **LT Neutralization Buffer** to the antibody. Attach the cap. Vortex briefly. The antibody will be near neutral pH. The antibody is ready for downstream applications. **Note: There are no preservatives in the antibody. Use the antibody within one week or aliquot and store at -20° C or colder. Avoid multiple freeze thaws.**

**IR-Tip: Each Ligatrap™ Ig Resin column can be used up to 10 times without significant loss of binding capacity*

9. If the column will not be reused, it can be discarded. If column is to be reused, regenerate the column by adding 400µl of **LT Regeneration Buffer**. Vortex briefly for 15 seconds. Insert the Microspin column into a 2.0 mL Collection Tube and centrifuge between 2000-6000 x g for 1 minute.
10. To store resin add 400µl of **LT Storage Buffer**. Insert the Microspin column into a 2.0 mL Collection Tube. Centrifuge between 2000-6000 x g for 1 minute. Discard wash. Repeat with an additional two washes for a total of three washes. (3x400µl) Insert the bottom plug into the Microspin column, add 400µl of fresh **LT Storage Buffer** and store at 2-8° C.