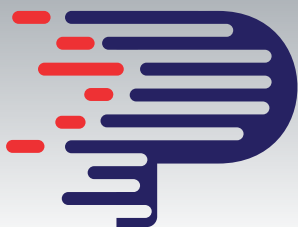


# Short Protocol for Proteios LEP Purification Kit



## Introduction

Proteios' Low-Expressed Protein (LEP) Purification Kit is based on the interaction between the Proteios Car9 affinity tag and the Proteios LEP Resin.

The target protein of interest (POI) can be expressed with a Proteios Car9 tag at either the N-terminal or C-terminal position. Car9-tagged POI binds to the Proteios LEP Resin and can be released with the addition of the Proteios LEP Elution Buffer.

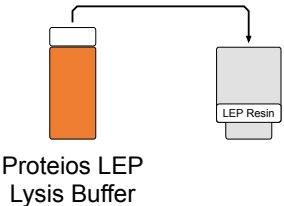
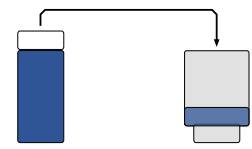
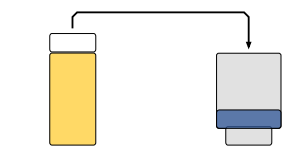
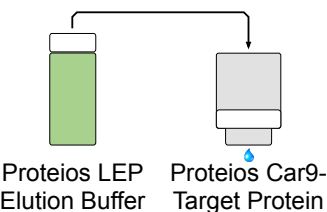
LEP purification kit has the unique propriety to be designed for low to very low expressed proteins and outperforms the traditional methods for protein purification using analog columns and resins.

Up to 2mg of moderate to very low expressed protein can be purified in about 15 minutes with an average purity > 90% using only one chromatography step and without the use of toxic metal ions or toxic reagents.

## Kit Components

| Description                                       | Size            |
|---|-----------------|
| Proteios LEP Column containing Proteios LEP Resin | 10 spin columns |
| Proteios LEP Lysis Buffer                         | 200mL           |
| Proteios LEP Wash Buffer                          | 150mL           |
| Proteios LEP Elution Buffer                       | 120mL           |

## Short Protocol for Proteios LEP Purification Kit

|  |   |
|--|---|
|  <p>Proteios LEP Lysis Buffer</p>                                     | <ol style="list-style-type: none"> <li><b>1. Equilibrate the column</b><br/>Add 4mL of Proteios LEP Lysis Buffer to the column. Spin the column at 500g for 2 minutes at room temperature and discard the flow through.</li> </ol>  |
|  <p>Lysate</p>  | <ol style="list-style-type: none"> <li><b>2. Load lysate on the column</b><br/>Load up to 4mL of lysate to the column. Spin the column at 500g for 2 minutes at room temperature and repeat for every 4mL of loaded lysate.</li> </ol>  |
|  <p>Proteios LEP Wash Buffer</p>                                     | <ol style="list-style-type: none"> <li><b>3. Wash</b><br/>Wash the column with 4mL of Proteios LEP Wash Buffer three times. Spin the column at 500g for 2 minutes for each wash and discard the flow through.</li> </ol>  |
|  <p>Proteios LEP Elution Buffer    Proteios Car9-Target Protein</p> | <ol style="list-style-type: none"> <li><b>4. Elution</b><br/>Add 4mL Proteios LEP Elution Buffer to the column. Spin the column at 500g for 2 minutes at room temperature. The Proteios Car9-tagged protein is collected in the eluate.<br/><br/>Repeat elution step another time to recover the remaining Proteios Car9-tagged protein.</li> </ol> |
|  | <ol style="list-style-type: none"> <li><b>5. Dialysis and concentration</b><br/>Proceed to dialyze and/or concentrate the purified protein of interest.</li> </ol>  |

For the full protocol and other protocols go to [www.proteios.com/resources](http://www.proteios.com/resources)

