Antibody package, Protein G: Purification of antibodies from most species, including rat



With our prepacked columns and verified protocols using ÄKTA™ chromatography systems, you can purify antibodies from most species, including rat, with ease.

#### Introduction

The basis for antibody affinity chromatography is the high affinity and specificity of protein G for the Fc-region of IgG from a variety of species, including rat.

Protein G immobilized on chromatography resin and is highly effective in isolating subclasses of IgG from ascites fluid, cell culture supernatants, and serum. Protein G binds antibodies of different species and subclasses, and is widely used for the routine purification of antibodies.

#### Contents of Antibody package, Protein G

- HiTrap<sup>™</sup> Protein G HP (1 × 1 mL)
- HiTrap Desalting (1 × 5 mL)



### How to use the kit

The following workflow describes the steps involved in purifying antibodies from most species, including rat.

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**Sample preparation** First, you need to prepare your sample for the affinity purification step. For optimal growth, induction and cell lysis conditions for your antibody clones, please refer to established protocols.

- Affinity purification Your kit includes a HiTrap Protein G HP column prepacked Protein G Sepharose<sup>™</sup> High Performance for fast, easy separations of IgG from different species and subclasses (including rat).
- **Buffer exchange** The kit also includes a HiTrap Desalting column for quick pH neutralization of the eluted antibodies.

**Analysis** Depending on your goal, several analytical methods can be used: SDS-PAGE for purity analysis, Western blotting for detection of target molecules, X-ray crystallography for structure determination, and mass spectrometry for identification.



## About the columns

To ensure that the columns do not interact with biomolecules, we produce them with biocompatible polypropylene. HiTrap columns can be used singly or connected in a series for easy scale up, together with a syringe, peristaltic pump, or chromatography system. HiTrap columns are well-suited for use with ÄKTA start, an easy-to-learn and easy-to-use system that eliminates the hassles of manual protein purification.

Enjoy your protein purification!

# **Ordering information**

Product	Quantity	Product code
Antibody package, Protein G	1	29058806
HiTrap Protein G HP	1 × 1 mL	29048581
HiTrap Desalting	1 × 5 mL	29048684

Download instructions for these products from cytiva.com: <u>HiTrap Protein G HP (code number 71700100)</u> and <u>HiTrap Desalting (code number 71715400).</u>

For detailed protocols, hints, and tips, download the *Affinity Chromatography Handbook: Vol. 1, Antibodies* (code number 18103746).

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