

IN Cell Analyzer 6000

- > Configurable confocality maximizes user-control of speed and image quality
- > Variable aperture design enables flexibility across a range of objectives, delivering the benefits of confocal technology across a broad spectrum of high-content challenges
- > Highly sensitive scientific-grade CMOS camera generates high-quality data from signals that would typically be lost in the noise
- > User-friendly acquisition features include preview scan, manual microscope mode, and whole-well imaging
- > Environmental control, liquid handling, temperature control, transmitted light imaging, and slide handling modules extend the range of assays that can be performed

IN Cell Analyzer 6000 is a high performance, laser-based, confocal, high-content analysis system for the most demanding high-content assays and screens. Featuring a next-generation scientific-grade CMOS camera and a proprietary fully adjustable aperture, the optical system allows you to optimize for speed and image quality extending the reach of HCA into applications more typically associated with low-throughput confocal microscopy including 3D imaging, co-localization studies, and assays with low signal.

Ordering information

Product	Code number
IN Cell Analyzer 6000	28-9939-14
IN Cell Analyzer 6000 (NA only)	28-9938-51

For more information on the IN Cell Analyzer platform, visit www.gelifesciences.com/incell



Protein Sample Preparation – new handbook

The overall goal of sample preparation is to feed the analytical technique of choice with protein subsamples of a quality that maximizes the chances of successful analysis. As protein analysis has become more complex and more sensitive, the need for adequate screening techniques has likewise grown. Protein sample preparation should therefore be a critical consideration for researchers in the following areas:

- > Proteomics
- > Functional genomics
- > Clinical studies (e.g., comparing protein sample before and after “treatment”)
- > Differential expression
- > Protein atlas studies (i.e., studying expression and localization of proteins within different cell types)
- > Structural studies
- > Functional studies

The goal of this handbook is to provide useful information and guidance to help make this very important starting point of analysis as well-defined and efficient as possible. The handbook is divided into five chapters, starting with an overview of protein sample preparation, followed by three chapters based on a conceptual, high-level workflow for protein sample preparation and analysis. The final chapter focuses on parallel processing and screening strategies in recombinant protein and monoclonal antibody production workflows.

The code number for ordering a printed copy of the handbook is **28-9887-41**, or download a PDF copy from www.gelifesciences.com/handbooks



Prepacked gravity-flow columns for antibody purification

rProtein A GraviTrap™, Protein G GraviTrap, and rProtein A/Protein G GraviTrap are prepacked gravity-flow columns designed for fast and efficient manual purification of monoclonal, polyclonal antibodies, and antibody fragments from cell culture supernatants and biological fluids.

The convenient, prepacked columns deliver:

- > Speed and simplicity—sample can be purified in 30 min
- > High binding capacity for antibodies—up to 50 mg human IgG/column
- > High purity and recovery—purity > 95% in one step and recovery typically 70% to 80%

The ready-to-use columns are prepacked with 1 ml of rProtein A Sepharose™ Fast Flow, Protein G Sepharose 4 Fast Flow, or a combination of 50% rProtein A Sepharose Fast Flow and 50% Protein G Sepharose 4 Fast Flow. The various ligands bound to Sepharose Fast Flow enable the user to capture and purify a broad range of IgG from different sources, as well as many different IgG subclasses. rProtein A/Protein G GraviTrap is a first choice product when the binding strength of the target protein is unknown.

The columns are reusable up to five times and are available in a 10 column package. The package itself converts into a convenient column lab stand (Workmate) while the plastic tray in the package is used to collect liquid waste.

Ordering information

Product	Code number
rProtein A GraviTrap, 10 × 1 ml	28-9852-54
Protein G GraviTrap, 10 × 1 ml	28-9852-55
rProtein A/Protein G GraviTrap, 10 × 1 ml	28-9852-56

For more information on GraviTrap columns, visit www.gelifesciences.com/sampleprep



MabSelect SuRe™ LX for MAb purification and method development

MabSelect SuRe LX is an alkali-stabilized, protein A-derived affinity medium with a binding capacity for monoclonal antibodies (MAbs) exceeding that of MabSelect SuRe at longer residence times.

Benefits of MabSelect SuRe LX include:

- > Alkali-stabilized protein A affinity medium with low ligand leakage based on the well-established MabSelect™ platform
- > Flexible process design due to large operational window of flow rates and bed heights
- > Prefilled in PreDicator™ 96-well plates and prepacked in HiScreen™ columns for rapid small-scale purification and method development
- > Medium available in 25 and 200 ml lab packs for scale-up

Ordering information

Product	Code number
MabSelect SuRe LX, 25 ml	17-5474-01
MabSelect SuRe LX, 200 ml	17-5474-02
PreDicator MabSelect SuRe LX, 6 µl, 4 × 96-well plates	17-5474-30
PreDicator MabSelect SuRe LX, 20 µl, 4 × 96-well plates	17-5474-31
PreDicator MabSelect SuRe LX, 50 µl, 4 × 96-well plates	17-5474-32
HiScreen MabSelect SuRe, 1 × 4.7 ml	17-5474-15

For more information on MabSelect SuRe LX and other media for purification of antibodies, visit www.gelifesciences.com/protein-purification



Streptavidin Mag Sepharose™ magnetic beads

Streptavidin Mag Sepharose are magnetic beads for simple and efficient enrichment of target proteins containing biotin by immunoprecipitation and for purification of biotinylated biomolecules. Streptavidin Mag Sepharose utilizes the strong interaction between biotin and the streptavidin ligand, which is immobilized on the magnetic beads. Collection of biotinylated targets is achieved simply and quickly using the magnets provided by MagRack 6 (for sample volumes up to 1.5 ml) or MagRack Maxi (for sample volumes up to 50 ml).

Streptavidin Mag Sepharose delivers:

- > High-capacity small-scale purification of proteins from cell lysates and biological fluids
- > High purity and yield
- > Easy parallel screening of proteins with high repeatability
- > Simple enrichment of proteins from small or large sample volumes (low-microliter to high-milliliter scale)

The beads are available in two pack sizes: 2 × 1 ml of 10% medium slurry and 5 × 1 ml of 10% medium slurry. One milliliter of 10% medium slurry is equivalent to 100 µl of sedimented medium and it is sufficient for 20 purification runs according to the recommended immunoprecipitation protocol.

Ordering information

Product	Code number
Streptavidin Mag Sepharose, 2 × 1 ml	28-9857-38
Streptavidin Mag Sepharose, 5 × 1 ml	28-9857-99

MagRack Maxi

MagRack Maxi is a new magnetic rack for small-scale protein purification and sample enrichment with magnetic beads. MagRack Maxi is used for capture of Mag Sepharose™ magnetic beads in volumes up to 50 ml. MagRack Maxi complements MagRack 6, which is a magnetic rack for processing of up to six samples in 1.5 ml microcentrifuge tubes.

Each rack consists of an anodized aluminum housing (blue) with a detachable plastic bar (white) containing a neodymium magnet and this design allows for optimal performance during protein purifications or enrichments using Mag Sepharose beads.

One of the main advantages of the magnetic beads separation method is the ability to vary the amount of medium as well as the sample volume. MagRack Maxi and MagRack 6 together cover a broad range of sample volumes from low-microliter to high-milliliter purification scales and this further enhances the flexibility of magnetic beads separations. The ability to use a larger sample volume allows high yields in a single purification run and also allows capture of low-expressed target proteins.

Ordering information

Product	Code number
MagRack Maxi	28-9864-41

For more information on MagRack Maxi, MagRack 6, and the range of Mag Sepharose magnetic beads, visit www.gelifesciences.com/sampleprep

For more information on GraviTrap columns, visit www.gelifesciences.com/sampleprep



Capto™ ImpRes for purification and method development

Capto SP ImpRes and Capto Q ImpRes are strong cation and strong anion exchangers for the high-throughput intermediate purification and polishing steps of a wide range of biomolecules. These media combine the high-flow characteristics of Capto media with a small particle size to deliver excellent pressure-flow properties with impressive resolution. The ability to run at higher flow rates and higher bed heights also increases flexibility in process design.

Benefits of Capto SP ImpRes and Capto Q ImpRes include:

- > High-resolution intermediate purification and polishing based on the well-established Capto platform with traditional ligands
- > Flexible process design due to large operational window of flow rates and bed heights
- > High-throughput purifications that are easy to optimize and to scale up
- > Prefilled in PreDicator 96-well plates and prepacked in HiTrap™ and HiScreen columns for rapid small-scale purification and method development
- > Media available in 25 and 100 ml lab packs for scale-up

Ordering information

Product	Code number
Capto SP ImpRes, 25 ml	17-5470-10
Capto Q ImpRes, 100 ml	17-5470-02
Capto SP ImpRes, 25 ml	17-5468-10
Capto SP ImpRes, 100 ml	17-5468-02
HiTrap Capto SP ImpRes, 5 × 1 ml	17-5468-51
HiTrap Capto SP ImpRes, 5 × 5 ml	17-5468-55
HiScreen Capto SP ImpRes, 1 × 4.7 ml	17-5468-15
HiTrap Capto Q ImpRes, 5 × 1 ml	17-5470-51
HiTrap Capto Q ImpRes, 5 × 5 ml	17-5470-55
HiScreen Capto Q ImpRes, 1 × 4.7 ml	17-5470-15
PreDicator Capto SP ImpRes, 6 µl, 4 × 96-well filter plates	17-5468-16
PreDicator Capto SP ImpRes, 20 µl, 4 × 96-well filter plates	17-5468-17
PreDicator Capto Q ImpRes, 6 µl, 4 × 96-well filter plates	17-5470-16
PreDicator Capto Q ImpRes, 20 µl, 4 × 96-well filter plates	17-5470-17

For more information, visit www.gelifesciences.com/protein-purification

Celebrating 20 years of HiTrap™ columns



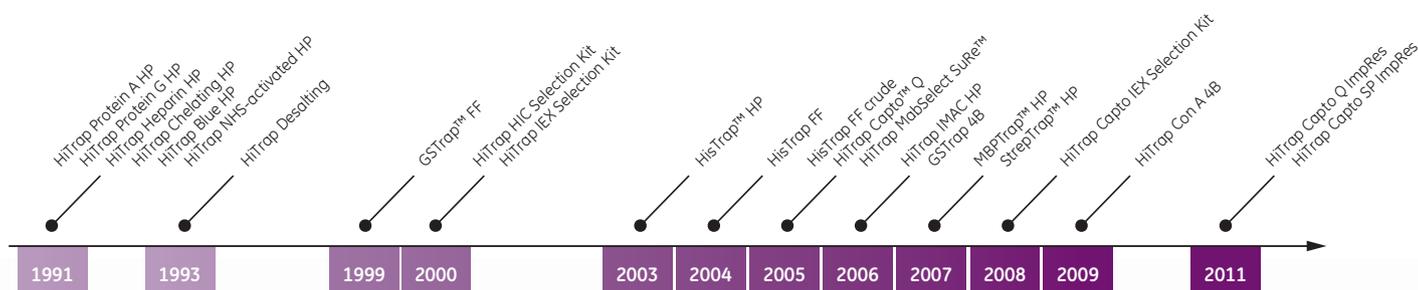
One of GE Healthcare Life Sciences' well-known brands, HiTrap, was launched in 1991. The prepacked format of HiTrap columns was an immediate success, bringing convenience and time-saving to previously laborious column chromatography.

The first six columns launched in 1991 were HiTrap Protein A HP, HiTrap Protein G HP, HiTrap Heparin HP, HiTrap Chelating HP, HiTrap Blue HP, and HiTrap NHS-activated HP.

Over the years, many successful columns have been added to the family to give academic researchers and process developers a wide range to choose from. By February 2011, the product family had grown to 135 different columns covering the most used chromatography techniques—desalting, affinity, IEX, and HIC.

HiTrap columns are often imitated, but never duplicated and still after 20 years remain highly popular. It is amazing to think that if we connected all HiTrap columns sold globally in 2010 together, the chain of columns would be almost 5 km (just over 3 miles) long!

HiTrap column launch timeline



To learn more about HiTrap columns and to view the whole GE range of products, please visit www.gelifesciences.com/hiTrap

Protein Sciences courses – enabling improved performance in protein research

GE Healthcare Life Sciences provides training courses to help you obtain the best possible results and to ensure optimal use of your GE Healthcare equipment.

European Training Center, Munich, Germany

Equipped with modern laboratories for protein separation, detection, and analysis, our training center in Munich offers courses including the Fast Trak program for protein purification at laboratory scale with ÄKTA™ avant chromatography systems and UNICORN™ software, label-free interaction analysis with Biacore™ and MicroCal™ systems, and successful 2-D electrophoresis and analysis using Ettan™ DIGE system. We also offer customized courses and/or on-site training on request.



The standard courses available in 2011 are:

Protein purification for researchers

ÄKTA avant and UNICORN 6 Introductory Course
Standard ÄKTA and UNICORN 5 Introductory Course

Proteomics research – 2-D DIGE electrophoresis and analysis

Ettan DIGE Training Course
Ettan DIGE Analysis Course

MicroCal courses

Advanced Differential Scanning Calorimetry (DSC)
Advanced Isothermal Titration Calorimetry (ITC)

Biacore courses

Biacore Basics
Kinetics and Affinity Analysis – Level 1 and Level 2

For the latest course schedule and information on customized courses/on-site training, visit www.gelifesciences.com/pscourses or send an email to pscourses.europe@ge.com