

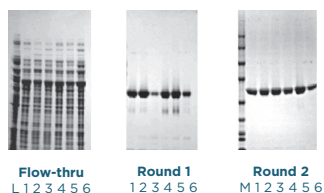
# PROTEIN | MAKER™



Produce more **protein**, more flexibly, with the **Protein Maker**.

**Accelerate your research** on protein function. The Protein Maker workstation makes high throughput protein purification chromatography simple by allowing you to run 24 columns (typically 1 or 5 ml) in parallel and process the samples unattended. The Protein Maker's flexible design allows you to customize sample and column types to achieve a variety of tasks:

- > **Produce** purified proteins and antibodies in a high-throughput, parallel format
- > **Evaluate** gene expression levels
- > **Analyze** functions of different isotypes or clones
- > **Determine** the best protein or enzyme purification method for scaling up
- > **Screen** constructs for protein structure studies



**Left:** Flow through fractions. **Center:** Eluted His6-tagged protein from Round 1. **Right:** From Round 2 of IMAC.

Protein Maker was used to purify 6 surface mutant variants of recombinant proteins expressed in *E. coli*. His6-tagged proteins were purified through two rounds of Ni<sup>++</sup> immobilized metal chelate chromatography (IMAC).

M= molecular weight standards  
L= total loaded sample of construct 1 to illustrate total *E. coli* lysate



# PROTEIN | MAKER™



## Powerful, flexible, fast

The patented Protein Maker's flexible design lets you perform wide-ranging proteomics projects or focus on a single gene product. Use a range of sample types and purification methods for high throughput production of extremely pure protein.

The Protein Maker protein purification engine is used by leading structural biologists as well as anti-body and antigen researchers and other scientists working on protein assays.

## Parallel Protein Chromatography

- > Load small to very large volumes, throughput can be up to 4 runs a day
- > Configure your own sample preparation protocol
- > Set up and walk away
- > Run 24 chromatography columns (from 0.1-5 ml) in parallel
- > Purify 12 samples in parallel with an optional 2-step purification process
- > Harvest multiple mg amounts

## Applications

- > Antibody purification from up to 1 liter or greater start volume (i.e. Protein A affinity chromatography)
- > Biomarker discovery and sample preparation for mass spectrometry using immuno-depletion resins (blood plasma or cerebrospinal fluid)
- > Parallel expression and purification testing of (surface) mutagenized protein constructs (i.e. Ni-chelate chromatography)

## Features

Typically used with any 1 ml or 5 ml chromatography column

- > **High-throughput parallel protein purification for:**
  - Production: 24 different protein samples, one type of chromatographic resin (multi-protein or multi-construct testing)
  - Scouting: 24 different chromatographic resins, one protein sample
  - Systematic two-step grid purification (2D chromatography) for 12 samples in parallel
- > Compatible with a wide range of volumes (i.e. load 250 ml, elute 0.5 ml)

U. S. PATENT No. 6,818,060 and patents pending



*Emerald Bio is a leading provider of protein science solutions. We develop and supply sophisticated **laboratory automation systems, reagent kits, stock solutions, proteins, and accessories for protein researchers.** An innovation leader, the team at Emerald Bio continues to create award-winning research tools that accelerate discovery and decision-making in protein labs worldwide. Our instrument solutions automate protein purification, liquid handling, and protein crystallization. We're the makers of the internationally recognized Wizard line of crystallography reagents. Our stock solutions are available individually, in convenient screens, and as custom products. And as the demands of protein research continue to grow, we now provide high purity proteins. For more information, visit [www.emeraldbiosystems.com](http://www.emeraldbiosystems.com)*