

## new products: protein analysis



### Magnetic Conjugation Kit

The Magnetic Conjugation Kit from Innova Biosciences allows researchers to covalently conjugate antibodies and proteins to 0.5-

µm magnetic particles without the need for extensive optimization of the conjugation reaction, thereby saving precious antibody or protein. Ideal for use in immunoprecipitation experiments, the kit features covalent attachment, which provides a more stable alternative to noncovalent antibody attachments using traditional protein A or protein G resin. The specially treated iron oxide magnetic particles offer an ideal balance between high surface area and fast separation, providing a binding capacity twice that of leading competitors, and are able to achieve high sensitivity with less material while minimizing the risk of nonspecific binding.

#### Innova Biosciences

For info: +44-(0)-1223-661000  
www.innovabiosciences.com

### Imaging System

With increasing adoption of fluorescent immunodetection methods, there is a heightened need for dependable multiplex Western blotting reagents and platforms. Multiplex Western blotting can be challenging, since it needs quite a bit of protocol optimization to detect proteins of varying abundance on the same blot. Also, finding high-quality antibodies that do not cross-react or show spectral crosstalk during fluorescent imaging is difficult. To make this process easy, Bio-Rad has launched a solution that helps scientists do more with less sample and reagents. The ChemiDoc MP Imaging System (with red-green-blue (RGB) and near-infrared capabilities), combined with the specificity of the Western blot-validated PrecisionAb primary antibodies (the ultrasensitive StarBright Blue 700 Fluorescent Secondary Antibodies and the hFAB Rhodamine Anti-Housekeeping Antibodies) and stain-free gels, makes up a unique, powerful toolbox, allowing the detection and quantification of up to three proteins on a single blot without stripping, reprobing, or cutting the membrane.

#### Bio-Rad

For info: 800-424-6723  
www.bio-rad.com/en-us/product/chemidoc-mp-imaging-system

### UHPLC Columns and Solvents

The Thermo Fisher Scientific Vanquish ultra-high performance liquid chromatography (UHPLC) columns and Fisher Chemical Optima UHPLC-MS solvents are specifically designed to complement the high-performance Vanquish UHPLC systems. The column portfolio, which consists of 16 UHPLC columns, offers a wide range of selectivity and format options for different applications, such as rapid screening for drugs of abuse, pesticide studies, and metabolite and peptide analysis. The Fisher Chemical Optima UHPLC-MS solvents are high-quality, ultrapure, and designed to address the needs of chromatographers performing state-of-the-art UHPLC. These solvents are ideal for detecting trace amounts of analytes by tandem mass spectrometry (MS/MS) using either gradient or direct-flow analysis without baseline

interference. They provide a very low mass/noise level in both positive- and negative-mode ionization, minimal metal ion content, and a low UHPLC-UV response using photodiode array detection.

#### Thermo Fisher Scientific

For info: 800-955-6288  
www.thermofisher.com

### Bis-Tris Protein Gels

RunBlue Bis-Tris Protein Gels by Expedeon provide an alternative to NuPAGE Bis-Tris gels. These protein gels run with the same voltages, in the same tanks, and use the same MES/MOPS buffers as NuPAGE gels. RunBlue Bis-Tris gels achieve highly comparable results with exceptional reproducibility and resolution. Expedeon's new Bis-Tris gels can be run with standard MES or MOPS buffers depending on the molecular weight range of proteins to be separated, and use the same LDS sample buffer and protocols as NuPAGE (200 V). The cassettes fit in the NuPAGE SureLock tank without any need for adaptors or spacers, and gels are also compatible with the iBlot dry blotting system. There is no workflow disruption, no downtime, and no transition period.

#### Expedeon

For info: 844-611-3656  
www.expedeon.com

### Single-Cell Western Blots

Meet Milo. He does Single-Cell (sc) Westerns that'll let you measure protein expression in thousands of single cells in a single run. You'll get it all done in 4-6 hours with no overnight transfer step. And you can use off-the-shelf primary Western antibodies too—try that with flow cytometry. Milo makes measuring protein expression heterogeneity and identifying cellular subpopulations a breeze. Single-Cell Westerns happen on scWest chips. Put your cell suspension on the chip and put it in Milo. He captures 1,000+ cells, lyses them, runs an SDS-PAGE separation on every single cell, and immobilizes all your separated proteins in 5 minutes flat. Next, simply probe your protein targets on-chip with standard primary and secondary antibodies. One simple process lets you measure diverse targets and detect surface and intracellular proteins simultaneously. You can image probed scWest chips with any open-platform fluorescence microarray scanner.

#### ProteinSimple

For info: 888-607-9692  
www.proteinsimple.com

### Competent Cells

Vmax Express is a novel, fast-growing bacterial strain designed for high-level protein expression. This next-generation protein expression system can replace slow-growing *Escherichia coli* systems prone to low yields and the generation of insoluble inclusion bodies. Vmax cells are derived from the marine micro-organism *Vibrio natriegens*. This gram-negative, nonpathogenic bacterium doubles twice as fast as *E. coli*, produces greater amounts of biomass, and generates larger amounts of protein in a shorter time period. With a protein expression workflow similar to *E. coli*, Vmax Express is compatible with plasmids and antibiotics commonly used with bacterial expression systems such as *E. coli* BL21(DE3). Built with a tightly controlled, IPTG-inducible T7 promoter system, Vmax Express cells can be cultured using routine growth medium as well as commercial autoinduction media or our Vmax Enriched Growth Media (recommended for rapid growth and greatest accumulation of biomass).

#### SGI-DNA

For info: 855-474-4362  
https://sgidna.com/vmax-express.html

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# Science

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*Science* **358** (6360), 242.  
DOI: 10.1126/science.358.6360.242-a

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