



Run more protein samples, **faster**



Win the protein detection race with the E-PAGE™ 96 System

- Run 96 or more protein samples in 14 minutes
- Compatible with multichannel or robotic liquid handling systems
- Integrated, modular system is simple to use

High-throughput protein analysis



The E-PAGE™ 96 System pushes the envelope in protein electrophoresis. This modular system incorporates horizontal gel cassettes containing 96 sample lanes and 8 marker lanes in a patented staggered design, accommodating 16 mm running length. The revolutionary design and 14 minute run time increases throughput by almost one order of magnitude compared to traditional protein electrophoresis systems.

User-friendly system

The E-PAGE™ 96 High-Throughput Protein Electrophoresis System consists of closed, pre-cast E-PAGE™ 96 Gels and E-Base™ devices integrated in a horizontal format. To run a gel, simply (1) insert your gel onto an E-Base™ device, (2) load your samples, and (3) run the gel (Figure 1). Take advantage of automated liquid handling instruments

for even greater efficiency. After electrophoresis, you can open the cassette using the Butterfly Opener for staining or blotting. Use E-Editor™ 2.0 software to group and display the lanes in a single, aligned image for simplified analysis. You can easily rearrange or manipulate individual lanes as you require.

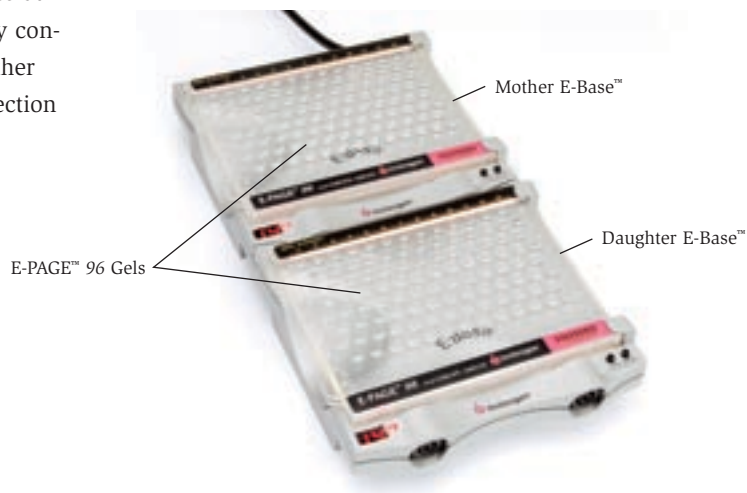
Figure 1 — E-PAGE™ 96 gel, loaded and ready to run



Expand throughput as needed

With the E-PAGE™ System's Mother E-Base™ and Daughter E-Base™ devices, you can run hundreds of samples at once from a single power outlet (Figure 2). Simply connect additional Daughter E-Base™ units to the Mother E-Base™ as needed. See the System components section for details.

Figure 2 — Multiple gels loaded onto Mother E-Base™ and Daughter E-Base™ Devices



E-PAGE™ System components and specifications

Pre-cast E-PAGE™ 96 Gels

E-PAGE™ 96 Gels are self-contained, pre-cast gels that include a gel matrix and electrodes packaged inside a disposable, UV-transparent cassette. The cassette may be easily opened for gel extraction and post-run procedures, such as staining and blotting. See Table 1 for list of specifications. Each E-PAGE™ 96 Gel offers:

- 96 sample lanes and 8 marker lanes compatible with the standard 96-well plate format
- Compatible with multichannel pipettors and with 8-, 12-, or 96-tip robotic loading devices for loading
- Labware definition files are available for select manufacturers
- Protein separation range of 15-270 kDa—Separation distance is 16 mm
- Barcode labels for easy identification using commercial barcode readers

- A Butterfly device to open the cassette and retrieve the intact gel for staining or blotting
- Optimized ready-to-use loading buffer, for SDS-PAGE and in-gel staining

Table 1 — E-PAGE™ 96 Gel specifications

Cassette size	13.5 (L) x 10.8 (H) x 0.67 cm (W)
Gel thickness	3.7 mm
Gel volume	50 ml
Well depth	3 mm
Well opening	3.8 mm x 1.8 mm
Well bottom	3.3 mm x 1.1 mm
Running distance	16 mm
Space between wells	9 mm
Sample Volume	20 µl
Max Protein Load	20 µg

E-PAGE™ System components (cont.)

E-Base™ device

E-PAGE™ 96 Gels run in specially designed E-Base™ devices (Figure 3), which are both bases and power supplies. They are pre-programmed to run E-PAGE™ 96 Gels in 14 minutes. E-Base™ devices are also compatible with the E-Gel™ 96 and E-Gel™ 48 Gels for DNA analysis.

- The **Mother E-Base™ device** contains an electrical plug that can be connected directly to an electrical outlet
- The **Daughter E-Base™ device** connects to the Mother E-Base™ and is used in conjunction with the Mother E-Base™ for electrophoresis of two or more E-PAGE™ 96 Gels. Except for the shared power supply, each Daughter E-Base™ functions independently.

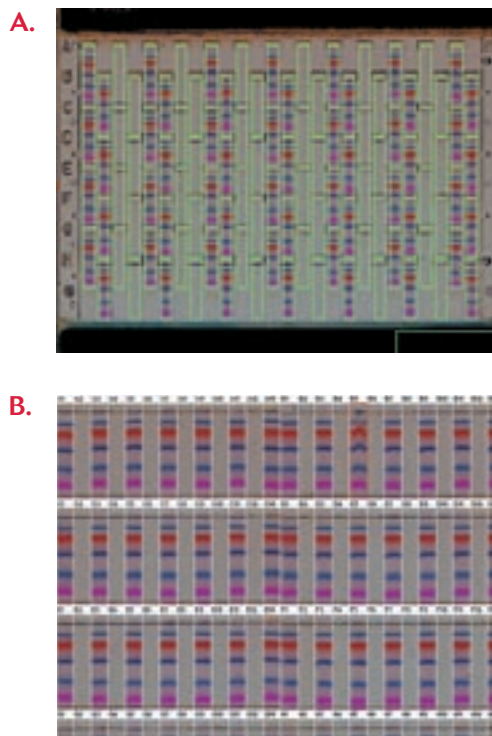
E-Editor™ 2.0 Software

The analysis of E-PAGE™ 96 results is fast and convenient, for both stained gels and blots, using the Windows®-based E-Editor™ 2.0 software. All 96 lanes (and the additional 8 marker lanes) are grouped and aligned into one image, for easy interpretation and comparison. Moreover, when 384-well assays are performed, E-Editor™ software allows selection of multiple automated loading patterns and grouping of four different E-PAGE™ 96 results into one integrated image. Thus, the software enables an immediate reference back from the gel or blot lane into the coordinates of the originating plate well to provide quick identification of important results.

Figure 3 — Mother and Daughter E-Base™ devices



Figure 4 — E-Editor™ 2.0 software



4A Pre-configured image of the gel; 4B Final reconfigured image of the gel

More wells, more experiments

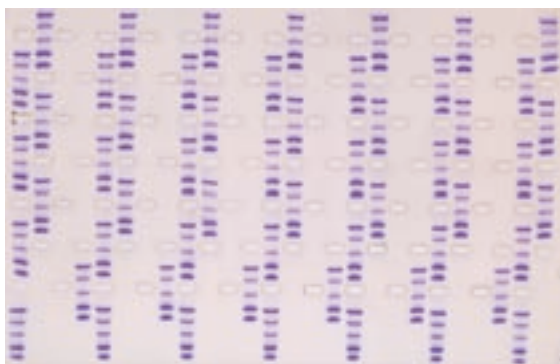
The E-PAGE™ 96 Gel design gives you more than just high throughput. It offers you the ability to multiplex experiments. The 96-well, horizontal format enables you to evaluate multiple controls in a single experiment or run multiple experiments in a single E-PAGE™ 96 Gel. In the single experiment set up, the 96-well format allows

you to include more positive and negative controls, resulting in better evaluation of the final results. In the multiple experiment format, it is easy to set up and compare several experiments in one run. In either case, you'll save time, materials, and labor, and achieve the best possible outcome.

Multiple applications

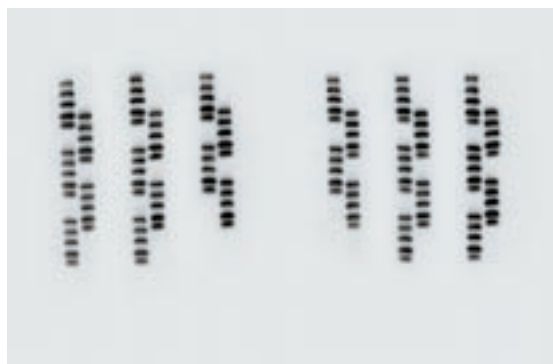
After completing your electrophoresis run, you can analyze the gel via staining or western blotting (Figures 5 and 6)

Figure 5 – Coomassie®-stained E-PAGE™ 96 Gel



10 μ l E-PAGE™ MagicMark™ Unstained Protein Standard includes the following proteins with molecular weights of 220 kDa, 120 kDa, 60 kDa, 40 kDa, and 20 kDa.

Figure 6 – Western blot of an E-PAGE™ 96 Gel



5 μ l E-PAGE™ MagicMark™ Unstained Protein Standard was run, blotted and detected using WesternBreeze® Immunodetection Kit. Anti-V5 primary antibody was used at 1:5000 dilution. The image was captured using a Fuji LAS-1000 Luminometer (20 second exposure).

When **high-throughput** protein electrophoresis is a must

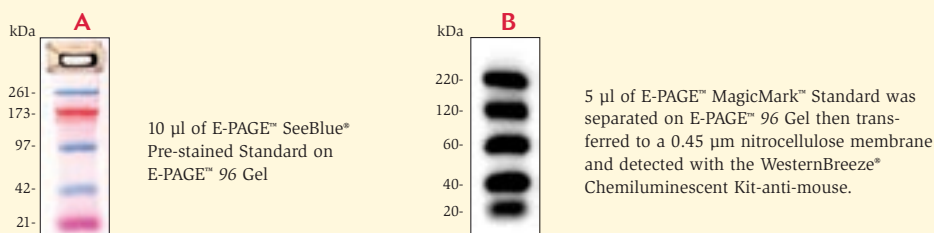
Do more protein analysis faster and easier. The E-PAGE™ 96 High-Throughput Protein Electrophoresis System will help you win the race in protein detection and analysis. Order yours today.

Easy band identification and molecular weight sizing

The E-PAGE™ Protein Standards are designed for the E-PAGE™ 96 Gel System, providing clear and sharp band resolution for SDS-PAGE and western blot applications. Use the E-PAGE™ SeeBlue® Pre-stained Standard for easy and quick band identification during electrophoresis and after transfer (Figure 7A). For

direct marker visualization and easy molecular weight sizing on westerns, the E-PAGE™ MagicMark™ Standard is your only choice (Figure 7B). With the E-PAGE™ Protein Standards, you'll get the greatest band clarity on your E-PAGE™ Gel marker lanes and improve sizing accuracy.

Figure 7 – E-PAGE™ Protein Standards



Product	Quantity	Cat. no.
E-PAGE™ 96 6% Kit*	1 kit	EP096-06
Mother E-Base™ device	1 unit	EB-M03
Daughter E-Base™ device	1 unit	EB-D03
E-PAGE™ Loading Buffer 1 (6x)	1 x 4.5 ml	EPBUF-01
E-PAGE™ Loading Buffer 2 (6x)	1 x 4.5 ml	EPBUF-02
E-PAGE™ Starter Kit**	1 kit	EPST9606
E-PAGE™ SeeBlue® Pre-Stained Standard	500 µl	LC5700
E-PAGE™ MagicMark™ Unstained Standard	250 µl	LC5701

*E-PAGE™ 96 6% Kit includes: 8 E-PAGE™ 96 gels, 4.5 ml each E-PAGE™ Loading Buffers 1 & 2, and one butterfly opener.

**E-PAGE™ Starter Kit includes: 1 Mother E-Base™, 4 E-PAGE™ 96 Gels, 4.5 ml each E-PAGE™ Loading Buffers 1 & 2, 500 µl E-PAGE™ SeeBlue® Pre-stained Protein Standard, and 1 butterfly opener.



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