

## TECHNICAL DATA SHEET

### Surf-Blot

145055, 145075, 145085, 145105, 145135

#### Eliminates Cutting Blots into Strips

Why cut your blot into strips? The SURF-BLOT can be used for any technique that formerly required cutting the blot into vertical strips. The SURF-BLOT clamps liquid channels tightly onto the surface of a blot. In a typical experiment, antigens are electrophoresed on a flat-topped gel and blotted. The blot is then clamped into the SURF-BLOT and antibody solutions are incubated in the liquid channels. After rinsing, the blot is removed from the SURF-BLOT and the blot visualization step is performed on the intact blot. Since there are no narrow strips to line up, the entire screening set can be compared on the intact blot.

The SURF-BLOT is the only antibody screening device that has a convex stainless steel backing plate, and has been shown leak-free by the HIV testing lab of the Harvard School of Public Health (for data see [www.ideascientific.com](http://www.ideascientific.com)).

Use the SURF-BLOT to screen monoclonals<sup>1</sup> or polyclonals<sup>2</sup>. Use the SURF-BLOT 10 or 10.5 for Grid-Blot screening<sup>3,4</sup>. SURF-BLOT data in U.S. patent application 20120003225 figure 5 display sera autoantibodies that can be used to detect and treat cancer.<sup>5</sup> Or use the SURF-BLOT to optimize your blot processing conditions by varying the amount and ratios of primary and secondary antibody.

1. Mukherjee, J., et al., *Infection and Immunity*, Vol 70, pp. 612-619 (2002). Fig 1 shows monoclonal antibody screening (PMID: 11796590).
2. Piccoli, G. et al., *Journal of Physiology*, Vol. 543.2, pp. 481-494 (2002). Figure 3. (PMID: 12205183).
3. Lane, R.D., et al., *Hybridoma*, Vol. 8, pp. 661-669 (1989). Grid-Blot screening does not require electrophoresis or blotting. (PMID: 2693340)
4. Reese, G. et al., *Journal of Chromatography B*, Vol. 756, pp. 151-156 (2001). allergic patient screening uses ten times less antibody than ELISA sera screening. (PMID: 11419706)
5. [www.faqs.org/patents/app/20120003225#b](http://www.faqs.org/patents/app/20120003225#b)

PRODUCT DESCRIPTION	BEST FOR	NUMBER OF CHANNELS	CHANNEL LENGTH	CHANNEL WIDTH	MAXIMUM BLOT WIDTH	SAMPLE VOLUME
SURF-BLOT 6	8 cm. tall minigels	30	6.0 cm.	1.5 mm.	8.9 cm.	60-90µl
SURF-BLOT 7	8 or 10 cm. tall minigels	30	7.0 cm.	1.5 mm.	8.9 cm.	70-105µl
SURF-BLOT 9	10 cm. minigels	30	8.9 cm.	1.5 mm.	8.9 cm.	90-135µl
SURF-BLOT 10	Grid-Blot experiments	30	10.1 cm.	1.5 mm.	8.9 cm.	100-150µl
SURF-BLOT 13	15 cm. tall gels	30	13.5 cm.	1.5 mm.	8.9 cm.	130-185µl
SURF-BLOT 5.5	8 cm. tall minigels	21	5.5 cm.	2.5 mm.	9.3 cm.	100-140µl
SURF-BLOT 7.5	8 or 10 cm. tall minigels	21	7.5 cm.	2.5 mm.	9.3 cm.	100-200µl
SURF-BLOT 8.5	Criterion™ gels	33	8.5 cm.	2.5 mm.	14.7 cm.	100-220µl
SURF-BLOT 10.5	Grid-Blot experiments	21	10.5 cm.	2.5 mm.	9.3 cm.	100-300µl
SURF-BLOT 13.5	large format gels	33	13.5 cm.	2.5 mm.	14.7 cm.	100-350µl

#### Lane Gap

- 21 Lane Channels: 4.5mm (center to center between lanes)
- 30 Lane Channels: 3 mm (center to center between lanes)
- 33 Lane Channels: 4.5 mm (center to center between lanes)