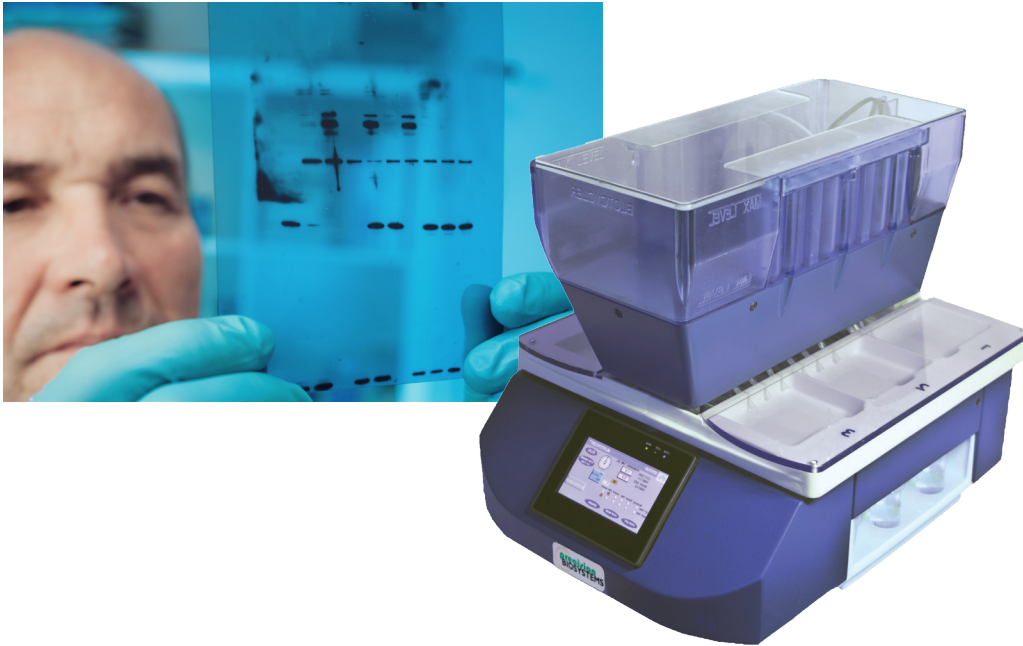


# BlotCycler™

Automatic western blot processor



- **Increase productivity** – process up to **24** western blots at a time
- **Start immediately** – use existing protocols and reagents
- **Get better results** – reduce variations in fluid delivery, timing and washing



# It's about time ...

## BlotCycler™ Automatic Western Blot Processing System

BlotCycler™ automates the time consuming, yet critically important tasks for achieving high quality western blot assays. Simple and practical in design, the system uses patented fluidic technology to automate the blocking, primary and secondary antibody incubation and washing steps with precise control.

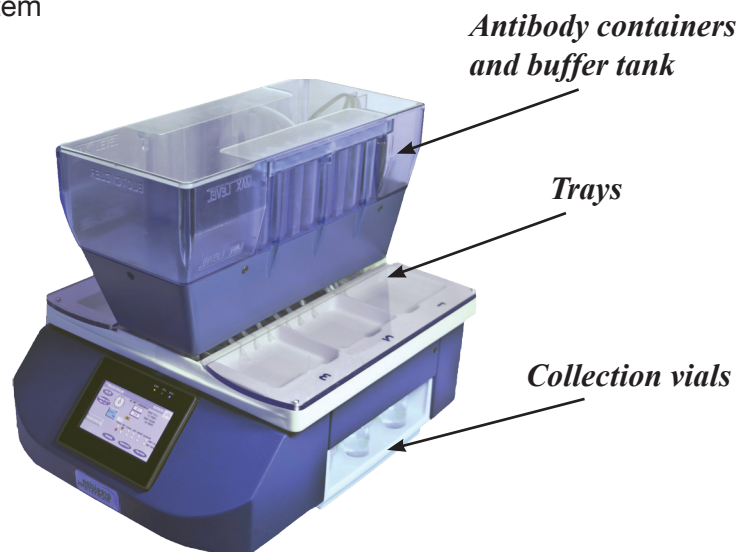
You obtain consistent and accurate results over and over again. The automated process efficiently manages the procedure without variation. Your laboratory improves productivity while achieving standardized, reproducible results.

### Product Description

BlotCycler™ is a compact, self-contained system requiring only 12" x 12" of bench space and standard electrical power. It has 6 trays for processing the blots, 12 separate antibody containers and a single, large tank for washing buffer.

Operation is simple: Researchers fill containers with primary and secondary antibody, and add washing buffer to the tank. Blotting membranes are placed in the trays and blocking buffer is added. Collection vials are placed under the trays to collect and save primary antibody for reuse.

Blocking time may be set from 10 minutes to 48 hours. The trays are gently agitated with a consistent shaking motion. When blocking is completed, buffer is drained and primary antibody is automatically added to the trays. Incubation time is programmable from 10 minutes to 48 hours.



*A touch screen allows users to select preset protocols or design new ones. The screen can be controlled remotely using an Internet connection.*

Upon completion of incubation, primary antibody is drained into collection vials and the blots are washed with buffer. Secondary antibodies are added to the trays. The automated wash process efficiently removes unbound antibody. Blots remain in the washing buffer until the bands are visualized. Once the protocol is completed and the blots are removed, a cleaning cycle prepares the system for the next run. See our video at [www.precisionbiosystems.com](http://www.precisionbiosystems.com).

## Features

- Conveniently fits into existing workflow using standard protocols and reagents
- Easily program up to 100 protocol steps, save up to 20 protocols in memory
- Unique washing method completely removes traces of reagents after each test
- BlotCycler™ is gravity fed – no pumps or complex fluid handling needed
- Built in the USA and patented

## Western Blot Workflow



## Application Examples

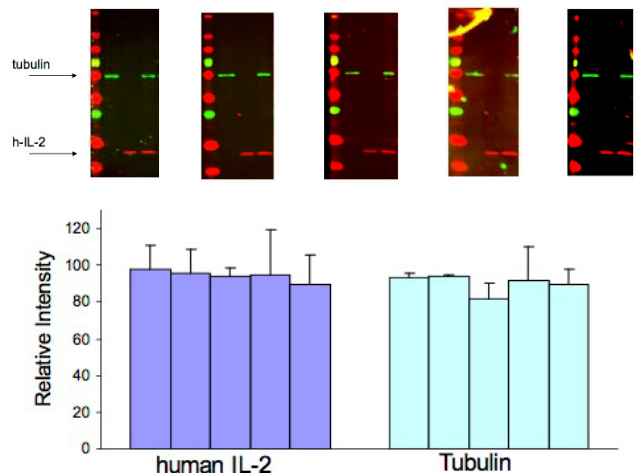
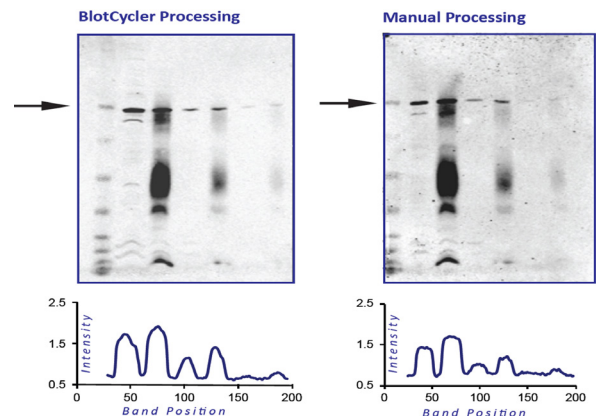
### Versatility

BlotCycler™ is compatible with multiple immunodetection technologies including fluorescent and chemiluminescent detection. In the examples shown at right, blots were processed using the same protocol using BlotCycler™ (left) or manually (right). Fluorescence labeled secondary antibodies were used to detect proteins. (Thanks to The Aaron Diamond AIDS Research Center, NY.)

### Reproducibility

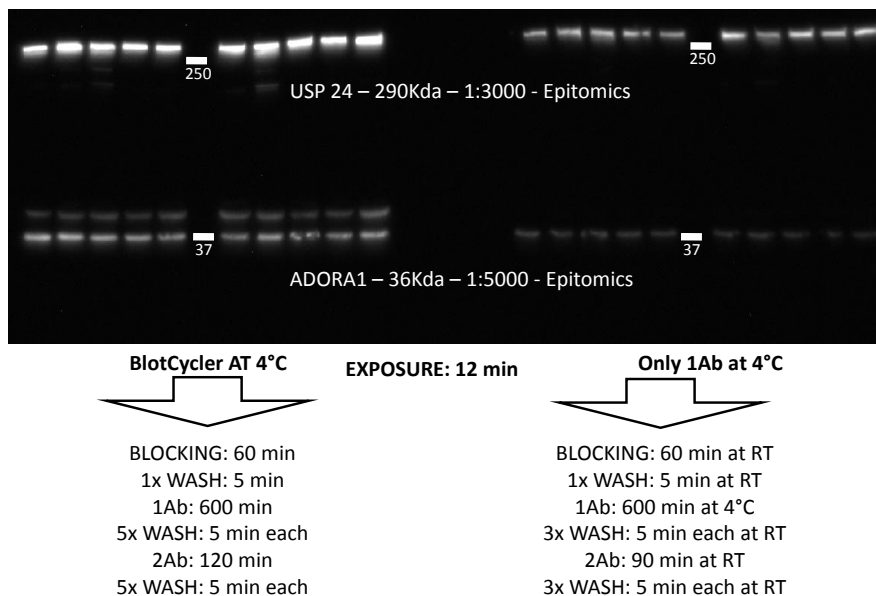
Five identical blots were processed using BlotCycler™. Each blot contained three lanes: HeLa whole cell lysate; the recombinant protein Human IL-2, and mixture of HeLa whole cell lysate and h-IL-2. Blots were incubated with a mix of rabbit anti-IL2 and mouse anti- $\alpha$ -tubulin, then probed with corresponding secondary antibodies: DyLight™ 549 conjugated anti-mouse IgG and DyLight™ 649 conjugated anti-rabbit IgG. The precise timing, consistent solution changes, and efficient washing made possible with automated processing resulted in excellent reproducibility, see example at right.

[For more BlotCycler™ Applications, visit our website.](http://www.precisionbiosystems.com)



**Enhanced protein detection following western blot processing at low temperature.**

Two identical blots were incubated with primary antibodies at 4°C and then processed either at 4°C using BlotCycler or at RT (room temperature) manually. See results at right.



**BlotCycler™ Automated Western Blot Processing System**

**Specifications**

- Input voltage: .....100-240V AC (single phase)
- Power frequency: ..... 5.0A max
- Polyurethane trays and tank
  - Mini..... 8 ml – 25 ml per chamber: 10 cm x 8 cm
  - Midi..... 13 ml – 40 ml per chamber: 10 cm x 15 cm
  - Delta..... 3 ml – 15 ml per chamber: 4 cm x 10 cm
- Dimensions:.....35 cm W x 34 cm H x 42 cm D (with mini tray)
- Weight: ..... 12 kg

**Performance Guaranteed**

ver. 3

**About Precision Biosystems**

Precision Biosystems is a Massachusetts-based company that provides solutions to help researchers automate difficult, time-consuming tasks in their laboratories. The company developed and manufactures BlotCycler™, an automated western blot processor based on patented fluid distribution technology



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