Amersham Typhoon Biomolecular Imager

Combine 4 instruments into 1
without compromising sensitivity and dynamic range

cytiva

Detect low levels of proteins

The ability to distinguish subtle differences in expression among low amounts of biomolecules in complex mixtures adds power to many areas of biological research. The highly versatile Amersham™ Typhoon™ laser scanner enables you to generate data of the highest quality through linearity of signal response, quantitative accuracy, and extremely low limits of detection. The completely customizable Typhoon supports phosphorimaging, 2-D DIGE imaging, red/green/blue (RGB) and near IR fluorescence as well as sensitive and accurate quantitation of proteins.

Enhance your sensitivity

- Improved PMTs with 5 Laser Configuration Option
- Multiplex detection of proteins with minimal crosstalk

Enhance your dynamic range

- Broad linear dynamic range greater than 5 orders of magnitude

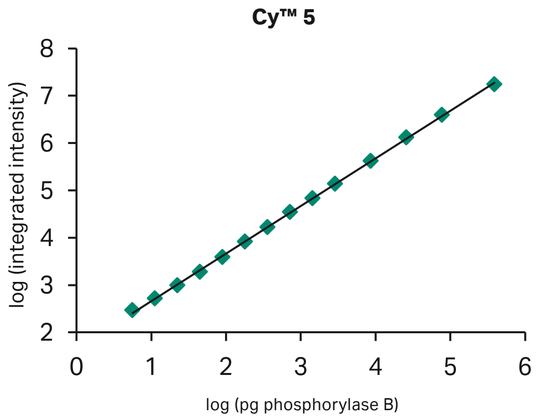

Fig 1. Phosphorylase B was labeled with CyDye™ DIGE fluor Cy5 minimal dye and separated using the Amersham WB electrophoresis gel. The gel was imaged with Amersham Typhoon using normal scan speed. The detection limit was 5.6 pg and the linear dynamic range (DR) was 4.8 orders of magnitude.

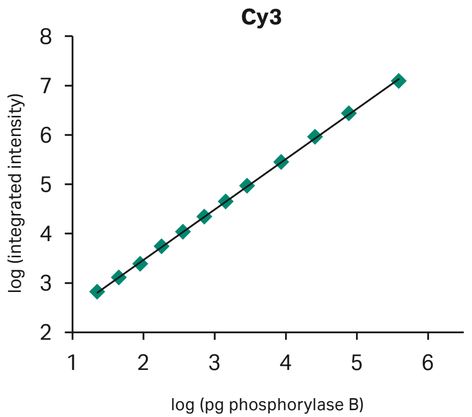

Fig 2. Phosphorylase B was labeled with CyDye DIGE fluor Cy3 minimal dye and separated using the Amersham WB electrophoresis gel. The gel was imaged with Amersham Typhoon using normal scan speed. The detection limit was 22 pg and the linear dynamic range (DR) was 4.2 orders of magnitude.

Three preconfigured models available:

	Phosphor Imaging	Densitometry (OD)	RGB Fluorescence	IR1 & IR2 Fluorescence
Amersham Typhoon RGB	✔	o	o	o
Amersham Typhoon RGB	✔	✔	✔	o
Amersham Typhoon 5	✔	✔	✔	✔

4 Instruments into 1

The Amersham Typhoon is an upgradeable laser scanner, completely customizable for your specific research needs. The system combines 4 instruments into 1, which allows for several imaging modes at any time, including near infrared (NIR) fluorescence, RGB fluorescence, Phosphor imaging, and densitometry of colorimetrically-stained samples (e.g., Coomassie™ blue and silver stain).

Enhance your flexibility

- Select the lasers you need for blue, green, red, or NIR detection
- Phosphorimaging for radiolabeled target detection and enhanced sensitivity

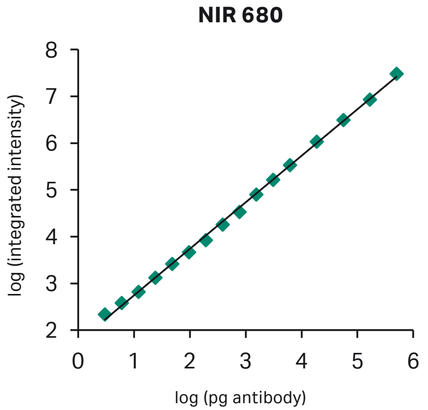

Fig 3. Antibody conjugated with IRDye™ 680 was separated using the Amersham WB electrophoresis gel. To reduce noise, the gel was imaged with Amersham Typhoon using slow scan speed. The detection limit was 3 pg and the linear dynamic range (DR) was 5.2 orders of magnitude.

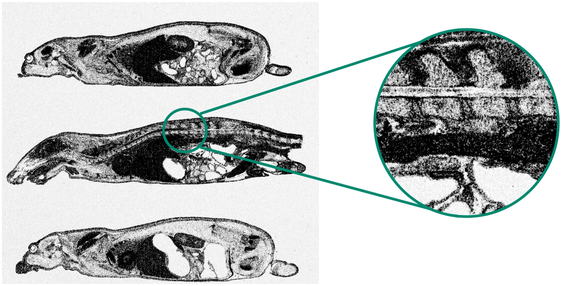

Fig 5. Autoradiography images of rat injected with ^{14}C glucose. The magnified area shows part of the spine.

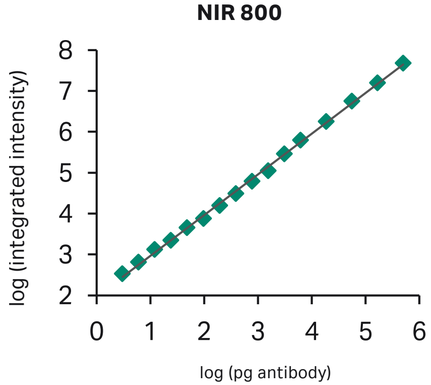

Fig 4. Antibody conjugated with IRDye™ 800 was separated using the Amersham WB electrophoresis gel. To reduce noise, the gel was imaged with Amersham Typhoon using slow scan speed. The detection limit was 3 pg and the linear dynamic range (DR) was 5.2 orders of magnitude.

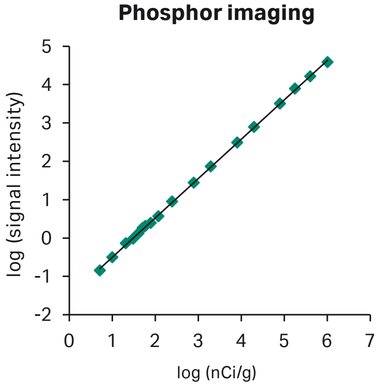

Fig 6. Scanned image of a ^{14}C autoradiographic standard using Amersham Typhoon. The linear dynamic range (DR) was 5.3 orders of magnitude.

Amersham Eraser

Amersham Eraser is a dedicated instrument for erasing imaging plates (storage phosphor screens), saving time and cost compared to using film. The LED light source provides an environmentally friendly option, with less energy consumption and longer life time than conventional light sources, while the drawer design with touch controls provides an easy to use interface.

Ordering information

System	Quantity	Product code
Amersham Typhoon 5	1	29187191
Amersham Typhoon RGB	1	29187193
Amersham Typhoon IP	1	29187194
Amersham Eraser	1	29187190
Accessory Cabinet AmTyphoon	1	29191637

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