



Save time by detecting three proteins, including normalization, in a single blot. The [NIR Plus](#) provides a three laser configuration for flexible infrared imaging.

Amersham™ Typhoon™ NIR Plus Biomolecular Imager



Plus option detects multiple proteins with normalization

Near infrared scanners provide quantitative detection of target proteins using NIR fluorescently labeled antibodies. The Amersham Typhoon **NIR Plus** provides all the functionality you would expect from a 2 channel near infrared scanner **plus** a third visible laser channel for additional protein detection or normalization. With the ability to simultaneously detect three proteins in the same gel or blot the **NIR Plus** is a time saving option that enables you to see more without worrying about reprobing and blot to blot variation, all while saving the amount of sample required!

How does “Plus” add value to your experiments?

Detect multiple proteins with normalization

- Visualize 2 target proteins plus a housekeeping gene in a single blot

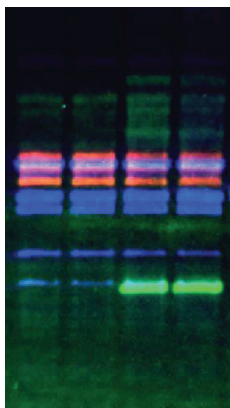


Fig. 1: Detection of proteins using three different primary antibody species (rabbit, mouse, and goat) is possible with the NIR Plus scanner.

- Visualize 2 target proteins plus total lane normalization with Amersham™ QuickStain reagents

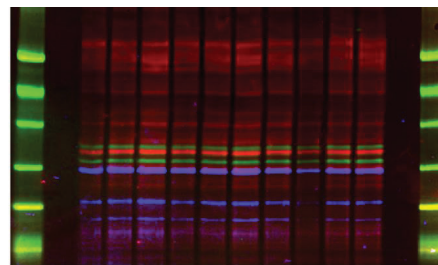


Fig. 2: Multiplex protein detection with total lane protein normalization. Different amounts of CHO cell lysate were loaded on an SDS-PAGE gel for Western blot detection. ERK and GAPDH were detected using the 532 nm and 785 nm lasers respectively. Amersham QuickStain labeled total protein for normalization was detected using the 685 nm laser.

Advanced detection technology

- New photomultiplier tube detectors provide single capture dynamic range of greater than 5 orders of magnitude

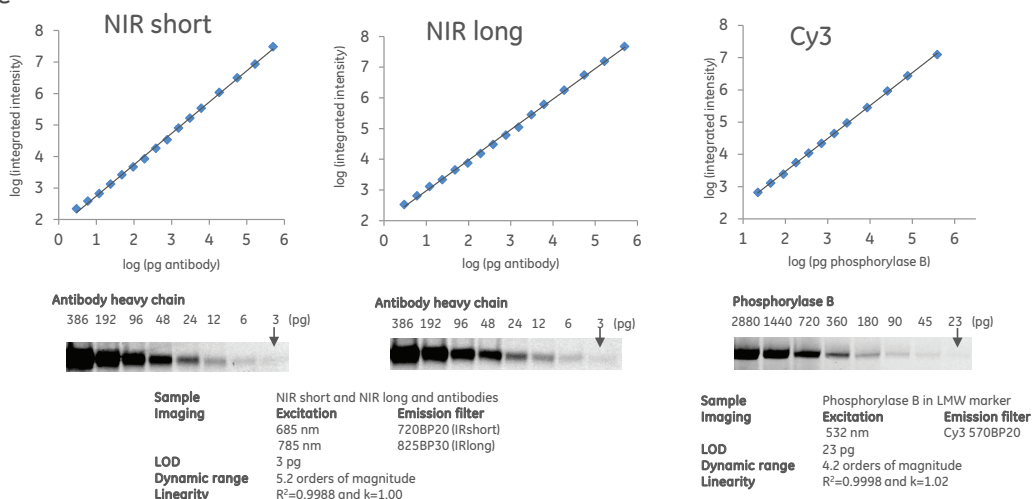


Figure 3: Fluorophore labelled antibodies and phosphorylase B were separated by 1D SDS electrophoresis gel. The gels were imaged with Amersham Typhoon NIR Plus. A selection of a dilution series is shown in the image, the arrow indicates the limit of detection (LOD).

Detection flexibility with high throughput formats and diverse sample types

The Amersham Typhoon **NIR Plus** provides a large scan area (40 x 46 cm) and 10 µm resolution which allows imaging of not only traditional Western blots, but also microtiter plates (up to 9 simultaneously). The **NIR Plus** also accommodates a wide range of diverse samples including tissue sections, plant leaves, and cell colonies.

Image 9 microtiter plates simultaneously for small or large screening applications

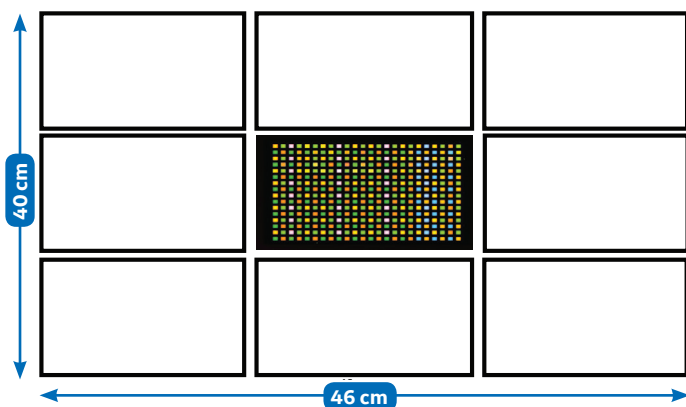


Figure 4: Three channel multiplex detection on 384-well microtiter plate. Amersham Typhoon NIR Plus can scan upto 9 microtiter plates per scan.

Modular system with upgrade capabilities

The Amersham Typhoon **NIR Plus** is a completely modular system that can be upgraded to a 5 laser configuration to meet your lab's future needs. Possible configurations include the addition of full visible fluorescence (Blue/Red), and phosphor imaging.

Open and flexible platform

The Amersham Typhoon **NIR Plus** is an open platform that works with most commercially available NIR detection reagents. Open data files are provided to enable further analysis in commonly used image analysis softwares, such as ImageJ.

NIR Plus sample types and applications*

- Electrophoresis gels (2D, SDS-PAGE, IEF, native, agarose)
- Membranes (Western, northern, southern)
- Microplates (assays, ELISA, In Plate Western)
- Petri Dishes (cell cultures)
- Glass slides (arrays)
- Gene screen plates
- Tissue sections on glass slides
- Biological samples (plant leaves, cell colonies)
- TLC plates

*Some applications may require additional accessories

Easy to use software

Save time with intuitive control software that provides consistent data acquisition.

- Three simple operation steps
- Auto-scan (Auto PMT setting)
- Improved method handling
- Scan speed control
- Multi-color display
- Easy display adjustment
- Export of displayed image
- Scan data direct print out



Ordering information

System	Quantity	Product code
Amersham Typhoon NIR Plus	1	29264463
Amersham Typhoon NIR	1	29238583
System accessories		
OD Plate AmTyphoon	1	29191517
Multi Stage AmTyphoon	1	29187198
TiterPlate holder AmTyphoon	1	29191520
33 × 42 glass plate guide AmTyphoon	1	29215514
Total lane normalization		
Amersham QuickStain	1	RPN4000
CyDye™ conjugated antibodies		
Amersham ECL Plex goat-a-mouse IgG-Cy3, 150 µg	150 µg	PA43009
Amersham ECL Plex goat-a-rabbit IgG-Cy3, 150 µg	150 µg	28901106
Image analysis software		
ImageQuant TL node locked	1	29000737
ImageQuant TL Security	1	29000740
Melanie 2D Classic node locked	1	29235229
Melanie 2D DIGE node locked	1	29235231

*One license of ImageQuant TL software is provided with each model of Amersham Typhoon scanners. Information on upgrade kits for additional lasers, filters, and other items can be obtained by contacting Customer Support.

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