Electrophoresis, Blotting and Immunodetection

Enzyme substrates/kits - Fluorescence

QuantaBlu™ fluorogenic peroxidase substrates, Thermo Scientific Pierce

Thermo



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More sensitive than TMB, OPD or ABTS substrates

The ideal fluorescent substrates for use with peroxidase enzymes

- Large dynamic range (4 log peroxidase concentration range)
- Excellent stability working solution is stable for 24hr
- Large stokes shift; excitation/emission maxima of 325/420; range of 315 to 345/370 to 460

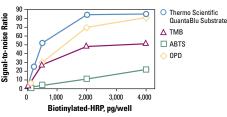
Thermo Scientific Pierce QuantaBlu™ substrate generates a non bleaching blue fluorescent product upon reaction with peroxidase.

Fluorometric based detection overcomes the limitations of colourimetric substrate detection, which does not allow for quantitation of greater than four optical density units. QuantaBlu™ substrate allows for stopped, non-stopped and kinetic assays to be performed. Incubation times for stopped and non-stopped assays can be varied between one to 90min at either room temperature or 37°C. QuantaBlu™ substrate exhibits a flat baseline in assays, which facilitates low level detection sensitivity and allows for high signal:noise ratios.

QuantaBlu™ substrate enables rapid detection of peroxidase at very low concentrations. Peroxidase is detected at 0 to 10pg per well from 1.5 to 6.5min of substrate incubation time. At cycle 1 (1.5min incubation) as little as 2.5pg of peroxidase could be detected, while at cycle 6 (6.5min incubation) 0.625pg of peroxidase could be detected.

Catalogue No	Description
PN15169	QuantaBlu fluorogenic peroxidase substrate Includes: Substrate, 250mL Stable peroxide solution, 30mL Stop solution, 275mL
PN15162	QuantaBlu NS/K substrate (for non-stopped and kinetic assays) Includes: Substrate, 250mL Stable peroxide solution, 30mL





Comparison of Thermo Scientific Pierce QuantaBlu substrate to other substrates. QuantaBlu substrate and the colorimetric substrates were incubated for 30 minutes at RT, followed by addition of a stop solution. QuantaBlu substrate produced the greatest signal-to-noise ratios and exhibited the lowest detection limit.

DyLight 680/800 near infrared Western blotting kit, Thermo Scientific Pierce

Thermo



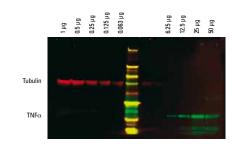
Compatible with LI-COR Odyssey™ and other fluorescent imaging systems.

The kit provides highly optimised reagents and a convenient format to save you the time and frustration of having to evaluate reagents for compatibility with fluorescent Western blotting. Each kit contains sufficient reagents for 10 Western blots and includes DyLight 680/800 Infrared protein molecular weight markers and secondary antibodies conjugated to DyLight 680 and 800 fluorescent dyes.

- DyLight 680 excitation/emission maxima 692/712nm
- DyLight 800 excitation/emission maxima 777/790nm

Near infrared fluorescent detection of two different targets on a single Western blot is easy to perform with the Thermo Scientific Pierce DyLight 680/800 Western blotting kit.

Catalogue No	Description
PN22855	DyLight 680/800 Western blotting kit
	Sufficient reagents for 10 Western blots. Includes:
	DyLight 680 goat anti-mouse IgG (H+L), 150µL
	DyLight 800 goat anti-rabbit IgG (H+L), 150µL
	DyLight 680/800 infrared protein MW markers, 30µL
	Wash buffer (30X), 200mL
	SEA BLOCK blocking buffer, 500mL
	Low fluorescence PVDF transfer membrane, 10 each



The Thermo Scientific Pierce DyLight 680/800 Western blotting kit provides low background and high signal in two colour Western blot detection. Proteins were separated in a 4 to 20% Thermo Scientific Pierce Precise protein gel and transferred to a low fluorescence PVDF membrane. The membrane was blocked overnight in Thermo Scientific Pierce SEA BLOCK blocking buffer and target proteins were detected according to the manufacturer's protocol. Membranes were imaged with the Lt-C0R Odyssey infrared imaging system. Tubulin was detected from the indicated quantity of HeLa cell lysate. Purified TNFa was detected at the indicated quantity.