# **Electrophoresis, Blotting and Immunodetection**

# Enzyme substrates/kits - Chemiluminescence

# SuperSignal ELISA Pico chemiluminescent HRP substrate, Thermo Scientific Pierce

### Thermo



- Emits light at 425nm
- High signal:noise ratio minimal background
- Low picogram sensitivity detects proteins in your ELISAs down to the picogram levels
- 8hr working solution stability consistent performance of the working solution over an 8hr period with only a 10% decrease in activity at 24hrs
- Immediate light generation intense signal is produced immediately at room temperature or at 37°C

Thermo Scientific Pierce SuperSignal ELISA Pico chemiluminescent substrate is optimised to generate an intense light signal and provide exception performance in luminometer based assays.

Catalogue No	Description
PN37070	SuperSignal ELISA Pico chemiluminescent substrate, 100mL Includes: Luminol/enhancer, 50mL Stable peroxide buffer, 50mL
PN37069	SuperSignal ELISA Pico chemiluminescent substrate, 250mL Includes: Luminol/enhancer, 125mL Stable peroxide buffer, 125mL

#### SuperSignal West Dura extended duration substrate, Thermo Scientific Pierce

# Thermo



Specially formulated for use with cooled-CCD cameras.

- 24hr light emission 10 times longer than with other enhanced chemiluminescent substrates for HRP; make multiple exposures for publication-quality blots
- Great sensitivity with femtogram-level detection, see bands you've never been able to see before
- Save your antibody requires very dilute antibody concentrations, allowing you to perform 25 to 50 times more blots than with other chemiluminescent substrates
- Intense immediate stable signal generation provides easy detection on film or compatible imaging system
- Working solution is stable for at least 24hr the kit itself is stable for at least one year with ambient shipping conditions

Thermo Scientific Pierce SuperSignal West Dura extended duration substrate for HRP is optimised for high sensitivity and long signal duration, making it ideal for cooled-CCD camera detection systems.

Unlike other substrates, whose signal declines to useless levels in 30 to 60 minutes, the signal produced with SuperSignal™ West Dura substrate is stable for several hours, allowing multiple film or camera exposures to be performed.





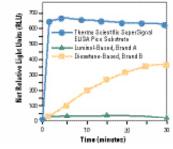
Thermo Scientific SuperSignal West Dura substrate 1 minute exposure 50ng to 3pg

Cooled CCD camera (30 and 15 minutes) 50ng to 3pg

Recombinant mouse IL-2 was serially diluted (50ng to 0.003ng) and electrophoresed. The gel to be used for SuperSignal West Dura substrate was transferred to nitrocellulose membrane. The membranes were blocked and then incubated with a  $1\mu$ g/mL dilution of the primary antibody, rat antimouse IL-2. After washing, the membranes were incubated with the secondary antibody, HRP conjugated goat anti-rat IgG. The membranes were washed again and then incubated with substrates. Each membrane was exposed to X-ray film for 5 minutes. The SuperSignal West Dura substrate membrane was exposed to the Chemilmager 4000 for 30 minutes.

Catalogue No	Description
PN34076	SuperSignal West Dura extended duration substrate, 200mL Sufficient for 2,000cm² of blotting membrane. Includes: Luminol/enhancer, 100mL Stable peroxide buffer, 100mL
PN34075	SuperSignal West Dura extended duration substrate, 100mL Sufficient for 1,000cm² of blotting membrane. Includes: Luminol/enhancer, 50mL Stable peroxide buffer, 50mL
PN37071	SuperSignal West Dura Extended Duration Substrate trial kit, 20mL Sufficient for 200cm² of blotting membrane. Includes: Luminol/enhancer, 10mL Stable peroxide buffer, 10mL





Immediate and stable light generation with Thermo Scientific Pierce SuperSignal ELISA Pico chemiluminescent substrate. 200pg of biotinylated HRP or biotinylated AP were added to separate wells of Thermo Scientific Pierce NeutrAvidin coated white polystyrene plates. The plates were then incubated for 30min at RT on a plate shaker and then each well was washed three times with Thermo Scientific Pierce BupH Tris buffered saline. Working solutions of chemiluminescent substrates were prepared according to the manufacturers' instructions. For SuperSignal ELISA Pico chemiluminescent substrate and another luminol-based system (Brand A). 100µL of each substrate working solution was added to the appropriate plate well. For the dioxetane-based system, wells were washed with 1X assay buffer. Next, 100µL of the dioxetane working solution was added to the appropriate plate well. All plates were incubated on a plate shaker at RT for 1min. Plates were then read on a Dynex MLX\* Luminometer with a 0.2s read time per well. Several readings were taken over a 30min period.