

WESTAR chemiluminescent substrates

Selection guide

Different levels of sensitivity available for your Western blotting

WESTAR is our product line of chemiluminescent substrates for Western blotting.

Cyanagen offers a family of products with different sensitivity, allowing from picogram to femtogram detection range.

Our proprietary technology enables fine tuning of signal intensity in order to obtain the assay sensitivity and signal duration best suited to meet each experimental need.

Product	Competitors	When to use
WESTAR SUN Cod. XLS063	AMERSHAM™ ECL™ - GE HEALTHCARE AMERSHAM ECL START™ - GE HEALTHCARE PIERCE™ ECL-THERMO SCIENTIFIC™ IMMOBILON® CLASSICO - MILLIPORE™	Entry level substrate for very abundant proteins
WESTAR NOVA 2.0 Cod. XLS071	PIERCE™ ECL PLUS -THERMO SCIENTIFIC™ IMMOBILON® CLASSICO - MILLIPORE™ WESTERN LIGHTNING™PLUS-PERKINELMER WESTERNBRIGHT™ ECL- ADVANSTA	Target and sample are abundant, lower sensitivity is needed
WESTAR ANTARES Cod. XLS142	CLARITY™ - BIO-RAD SUPERSIGNAL™ WEST DURA -THERMO SCIENTIFIC™ AMERSHAM™ ECL PRIME™ - GE HEALTHCARE SUPERSIGNAL™ WEST PICO PLUS - THERMO SCIENTIFIC™ IMMOBILON® CRESCENDO - MILLIPORE™ WESTERNBRIGHT™ QUANTUM™- ADVANSTA	Everyday applications, improved sensitivity over base level ECL, very long signal duration
WESTAR ETA C ULTRA 2.0 Cod. XLS075	SUPERSIGNAL™ WEST DURA -THERMO SCIENTIFIC™ AMERSHAM™ ECL PRIME™ - GE HEALTHCARE IMMOBILON® FORTE - MILLIPORE™ IMMOBILON® - MILLIPORE™ WESTERN LIGHTNING™PRO-PERKINELMER	Target is less abundant, maximum signal duration is needed
WESTAR SUPERNOVA Cod. XLS3	CLARITY MAX™ - BIO-RAD SUPERSIGNAL™ WEST FEMTO-THERMO SCIENTIFIC™ AMERSHAM™ ECL SELECT™ - GE HEALTHCARE WESTERNBRIGHT™ SIRIUS™- ADVANSTA WESTERN LIGHTNING™ULTRA-PERKINELMER	Target is least abundant, very high sensitivity
WESTAR HYPERNOVA Cod. XLS149	NO COMPETITORS AT THE SAME PERFORMANCE LEVEL	Trace amounts of protein, sample is precious, maximum sensitivity

WESTAR SUN

Our entry level substrate for mid picogram detection level.



Western blotting detection of ERK-1/2 on Hela cell lysate with WESTAR SUN and its competitors.

Sample: Two-fold dilution of Hela cell lysate from 5 µg to 0.078 µg

Primary antibody: Rabbit anti ERK-1/2 1:1000.

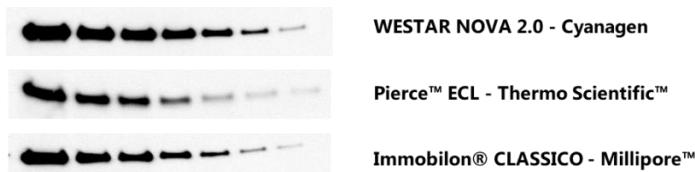
Secondary antibody: Donkey anti-rabbit IgG HRP 1:5000.

Imager: Westar R (Hi Tech Cyanagen). Exposure time: 90 seconds

WESTAR NOVA 2.0

Substrate for very abundant target and sample.

Stable light output for low picogram detection level.



Western blotting detection of HDAC-1 on Hela cell lysate with WESTAR NOVA 2.0 and its competitors.

Sample: Two-fold dilution of Hela cell lysate from 5 µg to 0.078 µg

Primary antibody: Rabbit-anti Human HDAC-1 1:2000.

Secondary antibody: Goat anti-rabbit IgG HRP 1:20000.

Imager: ImageQuant™ LAS 4000 (GE Healthcare). Exposure time: 180 seconds

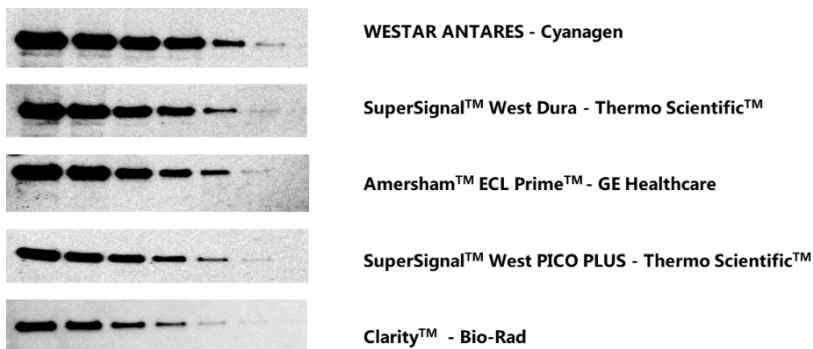
WESTAR ANTARES

Versatile substrate for mid-femtogram detection level.

Less optimization required.

High sensitivity combined with a broad linear dynamic range for an accurate quantification of both low and high abundance proteins in the same experiment.

Extremely long signal duration.



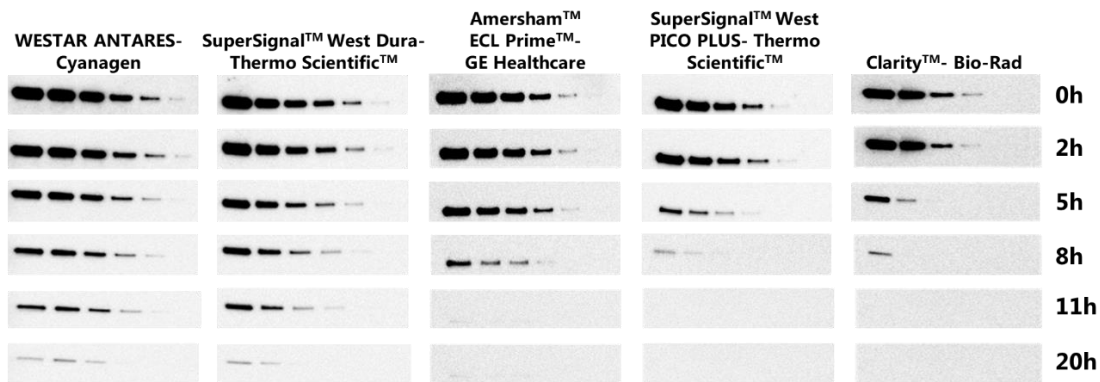
Western blotting detection of HDAC-1 on Hela cell lysate with WESTAR ANTARES and its competitors.

Sample: Two-fold dilution of Hela cell lysate from 5 µg to 0.078 µg

Primary antibody: Rabbit-anti Human HDAC-1 1:5000.

Secondary antibody: Goat anti-rabbit IgG HRP 1:75000.

Imager: ImageQuant™ LAS 4000 (GE Healthcare). Exposure time: 180 seconds.



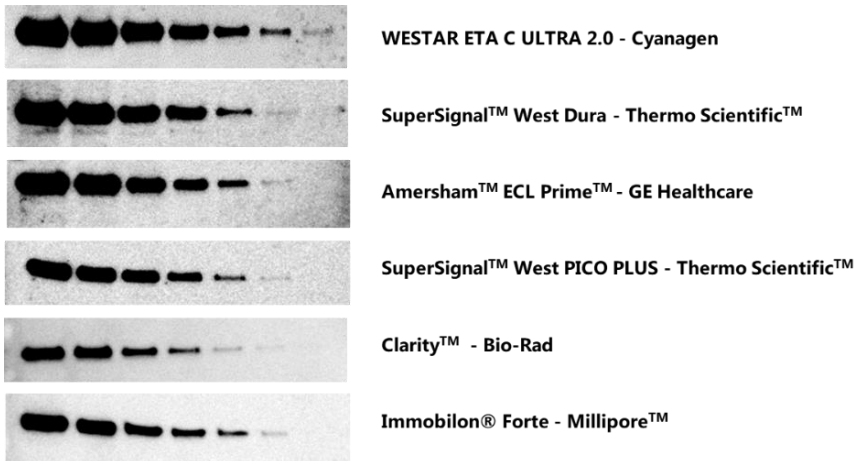
Extended signal duration of WESTAR ANTARES.

For either WESTAR ANTARES or its competitors, exposure time is 180 seconds for each time points (0-2-5-8-11-20 hours).

WESTAR ETA C ULTRA 2.0

Perfect choice for applications requiring very high sensitivity and an extended signal duration.

Strong signal in the presence of a very low background level, resulting in a high signal-to-noise ratio for mid to low femtogram detection level.



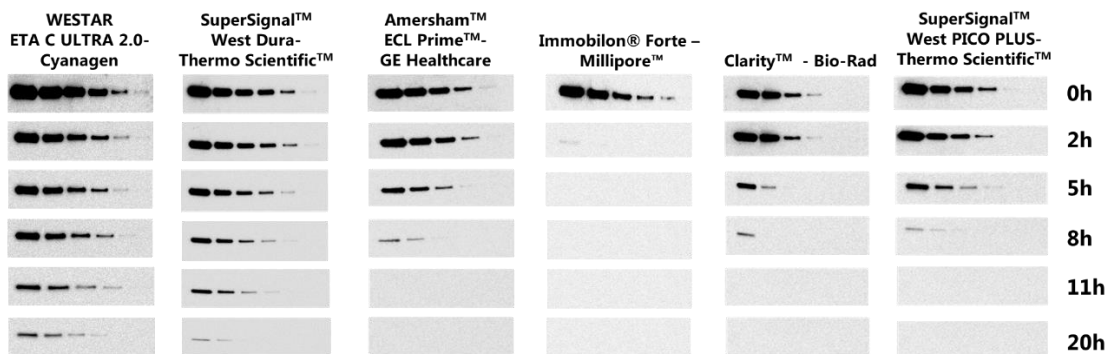
Western blotting detection of HDAC-1 on HeLa cell lysate with WESTAR ETA C ULTRA 2.0 and its competitors.

Sample: Two-fold dilution of HeLa cell lysate from 5 µg to 0.078 µg

Primary antibody: Rabbit-anti Human HDAC-1 1:7500.

Secondary antibody: Goat anti-rabbit IgG HRP 1:100000.

Imager: ImageQuant™ LAS 4000 (GE Healthcare). Exposure time: 180 seconds.



Extended signal duration with WESTAR ETA C ULTRA 2.0.

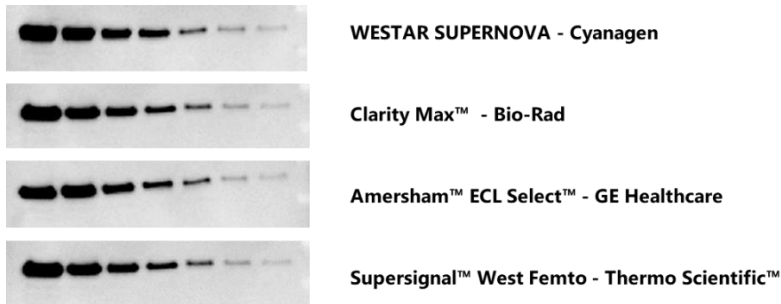
For either WESTAR ETA C ULTRA 2.0 or its competitors, exposure time is 180 seconds for each time points (0-2-5-8-11-20 hours).

WESTAR SUPERNOVA

Ultra-sensitive substrate with low-femtogram detection level.

Excellent signal intensity and sensitivity to detect very low amounts of proteins using less antibodies.

Wide linear dynamic range and ultra-high sensitivity for quantitative analysis.



Western blotting detection of HDAC-1 on Hela cell lysate with WESTAR SUPERNOVA and its competitors.

Sample: Two-fold dilution of Hela cell lysate from 2.5 µg to 0.039 µg

Primary antibody: Rabbit-anti Human HDAC-1 1:10000.

Secondary antibody: Goat anti-rabbit IgG HRP 1:300000.

Imager: ImageQuant™ LAS 4000 (GE Healthcare). Exposure time: 120 seconds.

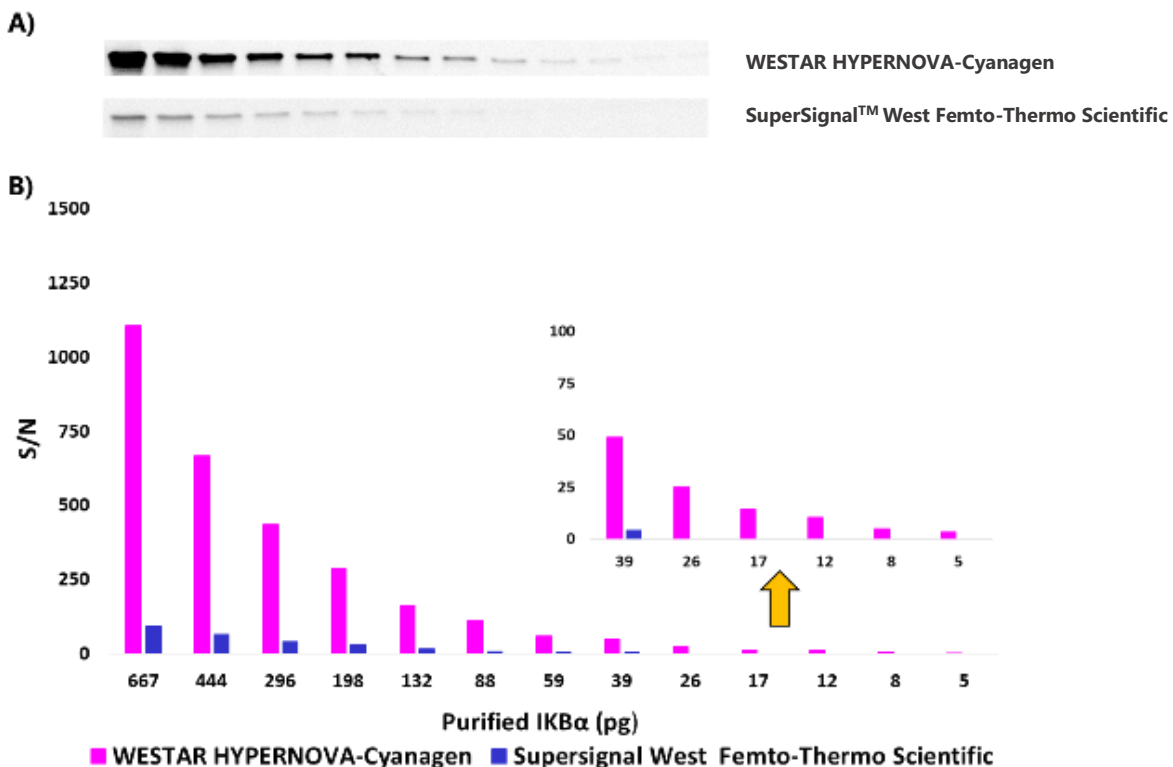
WESTAR HYPERNOVA

The most powerful substrate available to date allowing the detection of trace amounts of proteins.

Extreme signal intensity and sensitivity to enhance the accuracy of Western blotting for a clearer interpretation of the faintest bands.

Best choice to detect minute amounts of proteins, using extremely diluted antibodies or loading limited amounts of cell lysates, thus saving precious samples and expensive primary antibodies.

Extremely high light emission for very bright bands in few seconds of exposure.



Superior sensitivity of WESTAR HYPERNOVA

A) Purified IKBα detection with either WESTAR HYPERNOVA-Cyanagen or SuperSignal™ West Femto-Thermo Scientific. Blots containing 1.5-fold dilutions of purified IKBα from 667 µg to 5 µg were simultaneously imaged for 10 seconds with ImageQuant™ LAS 4000 (GE Healthcare).

B) Signal-to-noise ratio (S/N) analysis. The inset enlargement shows the enhanced sensitivity of WESTAR HYPERNOVA.