

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 START ™ - CYTIVA AMERSHAM ™ ECL ™ - CYTIVA PIERCE™ ECL-THERMO SCIENTIFIC ™ IMMOBILON® CLASSICO - MILLIPORE ™	Mid picogram detection
WESTAR NOVA 2.0 Cod. XLS071	PIERCE™ ECL PLUS -THERMO SCIENTIFIC ™ IMMOBILON® CLASSICO - MILLIPORE ™ WESTERN LIGHTNING™PLUS - REVVITY WESTERNBRIGHT™ ECL- ADVANSTA	Low picogram detection
WESTAR ANTARES Cod. XLS142	AMERSHAM [™] ECL PRIME [™] - CYTIVA CLARITY [™] - BIO-RAD SUPERSIGNAL [™] WEST DURA -THERMO SCIENTIFIC [™] SUPERSIGNAL [™] WEST PICO PLUS - THERMO SCIENTIFIC [™] IMMOBILON® CRESCENDO - MILLIPORE [™] WESTERNBRIGHT [™] QUANTUM [™] - ADVANSTA	Mid femtogram detection
WESTAR ETA C ULTRA 2.0 Cod. XLS075	SUPERSIGNAL [™] WEST DURA -THERMO SCIENTIFIC [™] IMMOBILON® FORTE - MILLIPORE [™] IMMOBILON® - MILLIPORE [™] WESTERN LIGHTNING [™] PRO - REVVITY	Mid to low femtogram detection
WESTAR SUPERNOVA Cod. XLS3	CLARITY MAX [™] - BIO-RAD AMERSHAM [™] ECL SELECT [™] - CYTIVA WESTERN LIGHTNING [™] ULTRA- REVVITY WESTERN BLOT ULTRA SENSITIVE HRP - TAKARA CHEMI-LUMI ONE ULTRA - NACALAI SUPERSIGNAL [™] WEST FEMTO-THERMO SCIENTIFIC [™] WESTERNBRIGHT [™] SIRIUS [™] - ADVANSTA	Low femtogram detection
WESTAR HYPERNOVA Cod. XLS149	NO COMPETITORS AT THE SAME PERFORMANCE LEVEL (IMMOBILON® ULTRA PLUS - MILLIPORE™)	Detection of trace amounts of proteins



WESTAR SUN

Our entry level substrate for mid picogram detection level.

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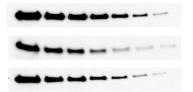
WESTAR SUN-Cyanagen PierceTM ECL-Thermo ScientificTM AmershamTM ECL- CYTIVA AmershamTM ECL Start- CYTIVA

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.



WESTAR NOVA 2.0-Cyanagen

Pierce™ ECL- Thermo Scientific™

Immobilon® CLASSICO-Millipore™

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.

 WESTAR ANTARES - Cyanagen
 SuperSignal [™] West Dura -Thermo Scientific [™]
Amersham [™] ECL Prime [™] - Cytiva
SuperSignal [™] West PICO PLUS – Thermo Scientific [™]
 Clarity [™] - BioRad

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.

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WESTAR ANTARES- Cyanagen	SuperSignal [™] West Dura- Thermo Scientific [™]	Amersham [™] ECL Prime [™] - Cytiva	SuperSignal [™] West PICO PLUS- Thermo Scientific [™]	Clarity ^{™.} BioRad	
					0h
					2h
					5h
				-	8h
					11h
					20h

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.

WESTAR ETA C ULTRA 2.0- Cyanagen	SuperSignal™ West Dura- Thermo Scientific™	Amersham™ ECL Prime™ - Cytiva	Immobilon® Forte – Millipore™	Clarity™ - BioRad	SuperSignal™ West PICO PLUS- Thermo Scientific™	
			-			0h
			~			2h
						5h
				-		8h
						11h
						20h

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).

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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.

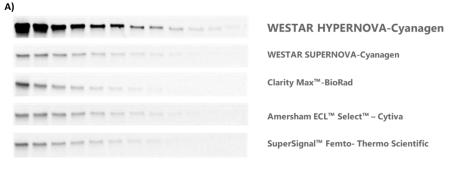
WESTAR HYPERNOVA

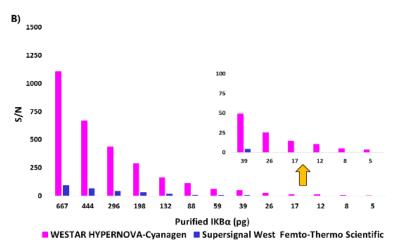
The most powerful substrate available to date allowing the detection of trace amounts of proteins.

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 IKB α 1,5 -fold dilutions from 1000 to 5,1 pg Ab 1° Rabbit anti IKB α 1:1000 Ab 2° Goat anti rabbit 1:500000 Exposure time: 10 seconds with ImageQuantTM LAS 4000 (GE Healthcare). B) Signal-to-noise ratio (S/N) analysis. The inset enlargement shows the enhanced sensitivity of WESTAR HYPERNOVA.

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