Neo Biotech
CliniSciences Group

SUBSTRATES FOR

Western Blotting & CLIA

CHEMILUMINESCENCE

NEOPRO
Two-Solutions
for WB

NEOPOR RTU
One-Solution
for WB

NEOLUME TABLET
Tablet
for WB

NEOLUME ECL
Two-Solutions
for CLIA



- **HIGH SENSITIVITY**
- **LONG SIGNAL DURATION**
- **EXCELLENT REPRODUCTIBILITY**
- **COMPATIBLE WITH ALL IMAGERS & FILM**

CliniSciences

Content

NeoPro : Two-Solution ECL Substrate for Western Blotting 01

- NeoPRO Nano 02
- NeoPRO Pico 03
- NeoPRO Pico PLUS 04
- NeoPRO Femto 06
- NeoPRO Femto Plus 08
- NeoPRO Atto 10

NeoPRO RTU: One-Solution ECL Substrate for Western Blotting 12

- NeoPRO RTU Pico 14
- NeoPRO RTU femto 16

NeoLume™ ECL Tablet Substrate : ECL Substrate in Tablets for Western Blotting 18

- NeoLume™ ECL Tablet Substrate – Ultra Sensitivity 19

NeoLume Chemiluminescent Substrates: for CLIA Immunoassay Manufacturers 21

- NeoLume Attogram Sensitivity 24

Contact address 28

NeoPRO

Two-solution ECL Substrates for Western Blotting

NeoPRO is the broad product line of two-component chemiluminescent substrates for Western blotting. The working solution, prepared by mixing the two components, a luminol/enhancer solution and a peroxide solution, in a one-to-one ratio, is stable for at least 24 hours at room temperature (RT). Different levels of sensitivity are available, allowing for a detection range from picograms to attograms. Two substrates, NeoPRO PICO and NeoPRO FEMTO, feature an extreme signal duration of up to twenty (20) hours. NeoPro Atto, instead, thanks to the specific technology, is the most powerful substrate on the market, allowing protein trace detections (attograms).

Features

- Compatible with all chemiluminescence imagers and X-ray film detection
- Well-suited for different types of membranes and blocking reagents, as well as a wide range of antibody dilutions
- Optimised for attaining a low background and high signal-to-noise ratio

Application

- Western Blot

Order Information

PRODUCT	COMPETITORS	WHEN TO USE
NeoPRO Nano Cod. NB-78-00001	AMERSHAM ECL START - CYTIVA AMERSHAM ECL - CYTIVA PIERCE ECL-THERMO SCIENTIFIC IMMOBILON CLASSICO - MILLIPORE	Mid picogram detection
NeoPRO Pico Cod. NB-78-00002	PIERCE ECL PLUS -THERMO SCIENTIFIC IMMOBILON CLASSICO - MILLIPORE WESTERN LIGHTNING PLUS - REVVITY WESTERNBRIGHT ECL- ADVANSTA	Low picogram detection
NeoPRO Pico PLUS Cod. NB-78-00003	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
NeoPRO Femto Cod. NB-78-00004	SUPERSIGNAL WEST DURA –THERMO SCIENTIFIC IMMOBILON FORTE - MILLIPORE IMMOBILON - MILLIPORE WESTERN LIGHTNING PRO - REVVITY	Mid to low femtogram detection
NeoPRO Femto Plus Cod. NB-78-00005	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 WESTERNBRIGHTSIRIUS- ADVANSTA	Low femtogram detection
NeoPRO Atto Cod. NB-78-00006	NO COMPETITORS AT THE SAME PERFORMANCE LEVEL	Detection of trace amounts of proteins

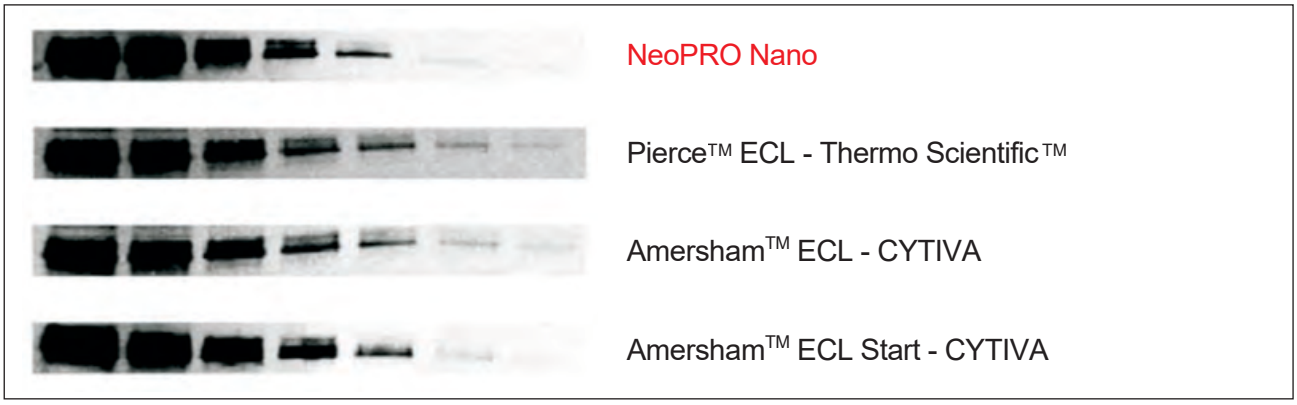
NeoPRO Nano

Two-Solution ECL Substrate for Western Blotting

NeoPRO Nano is the entry-level ECL of the NeoPRO product line. This substrate, with its stable light output for midpicogram detection level, low background, and high signal-to-noise and quality-to-price ratios, is ideal for routine daily assays.
The working solution, prepared by mixing the two components, a luminol/enhancer solution and a peroxide solution, in a one-to-one ratio, is stable for at least five (5) days at room temperature (RT).

Properties

Features	Entry-level ECL substrate for mid-picogram detection Working solution stable for at least five days Excellent performance/price ratio
Components	Luminol/enhancer solution (A) Peroxide solution (B)
Antibody Dilution Range	Primary: 1:100 - 1:5.000 Secondary: 1:1.000 - 1:15.000 (from 1 mg/mL stock solution)
Available as	2 x 125 mL kit (2500 cm^2 of membrane)
Storage	Stable for one (1) year from delivery at RT The product is shipped at ambient temperature.



Western blotting detection of ERK-1/2 on HeLa cell lysate with NeoPRO Nano 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 Neo Biotech). Exposure time: 90 seconds.

Order Information

PRODUCT	CODE	UNIT SIZE
NeoPRO Nano Western ECL Substrate	NB-78-00001	2x125mL/kit

NeoPRO Pico

Two-Solution ECL Substrate for Western Blotting

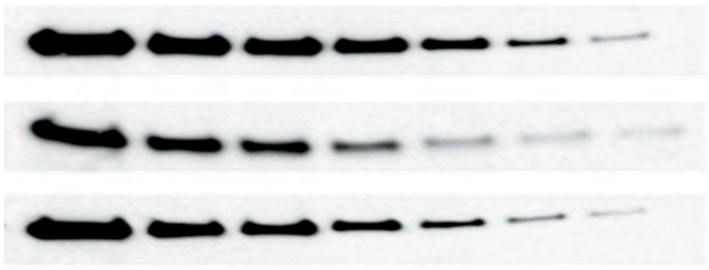
NeoPRO Pico is at the top of the entry-level ECL substrates segment due to its performance and quality. This substrate, with stable light output for a low-picogram detection level, low background, and high signal-to-noise and quality-to-price ratios, is ideal for those routine daily assays that require high-quality, reliable, repeatable and affordable results.

The working solution, prepared by mixing the two components, a luminol/enhancer solution and a peroxide solution, in a one-to-one ratio, is stable for at least three (3) days at room temperature (RT).

It can substitute the most common entry-level substrates on the market, without changes in the protocol.

Properties

Features	Entry-level ECL substrate for low picogram detections Ideal for routine analysis with high-quality results Working solution stable for at least three (3) days The best entry-level ECL substrate on the market
Components	Luminol/enhancer solution (A) Peroxide solution (B)
Antibody Dilution Range	Primary: 1:500 - 1:5.000 Secondary: 1:20.000 - 1:100.000 (from 1 mg/mL stock solution)
Available as	2 x 125 mL kit (2500 cm2 of membrane)
Signal duration	8 hours
Storage	Stable for one (1) year from the delivery at RT The product is shipped at ambient temperature



Western blotting detection of HDAC-1 on HeLa cell lysate with NeoPRO Pico 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 (Cytiva). Exposure time: 180 seconds

Order Information

PRODUCT	CODE	UNIT SIZE
NeoPRO Pico Western ECL Substrate	NB-78-00002	2x125mL/kit

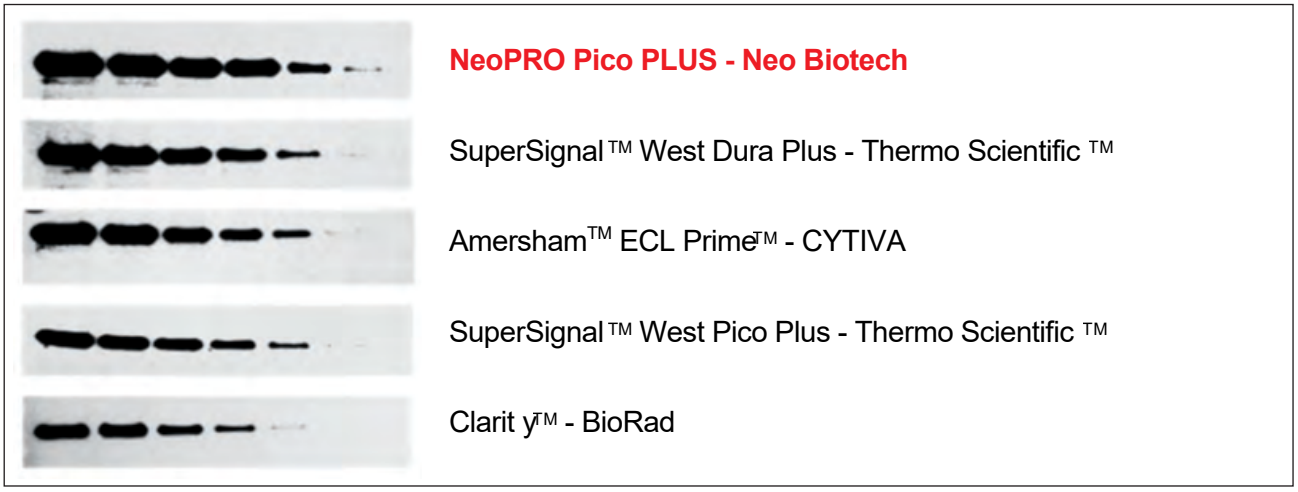
NeoPRO Pico PLUS

Two-Solution ECL Substrate for Western Blotting

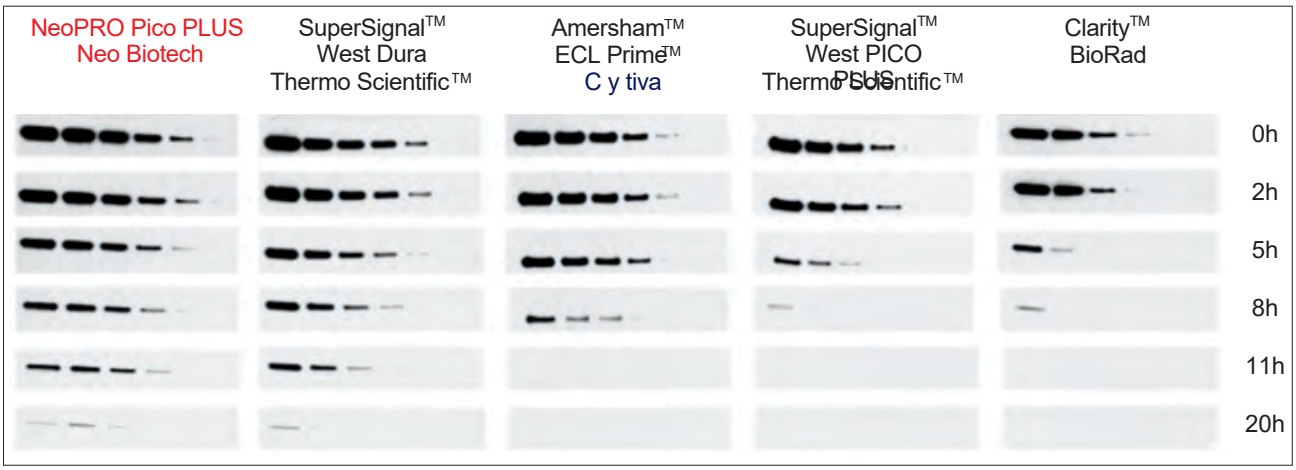
NeoPRO Pico PLUS is a versatile substrate for mid-femtogram detections, and it is ideal for reliable results in everyday experiments, combining high sensitivity with a broad linear dynamic range. This substrate allows the quantification of low and high-abundance proteins in the same experiment.
NeoPRO Pico PLUS features a highly extended signal duration, up to twenty (20) hours, depending on the assay.
The working solution, prepared by mixing the two components, a luminol/enhancer solution and a peroxide solution, in a one-to-one ratio, is stable for at least three (3) days at room temperature (RT).
NeoPRO Pico PLUS can substitute the most common mid-level substrates on the market without changes in the protocol.

Properties

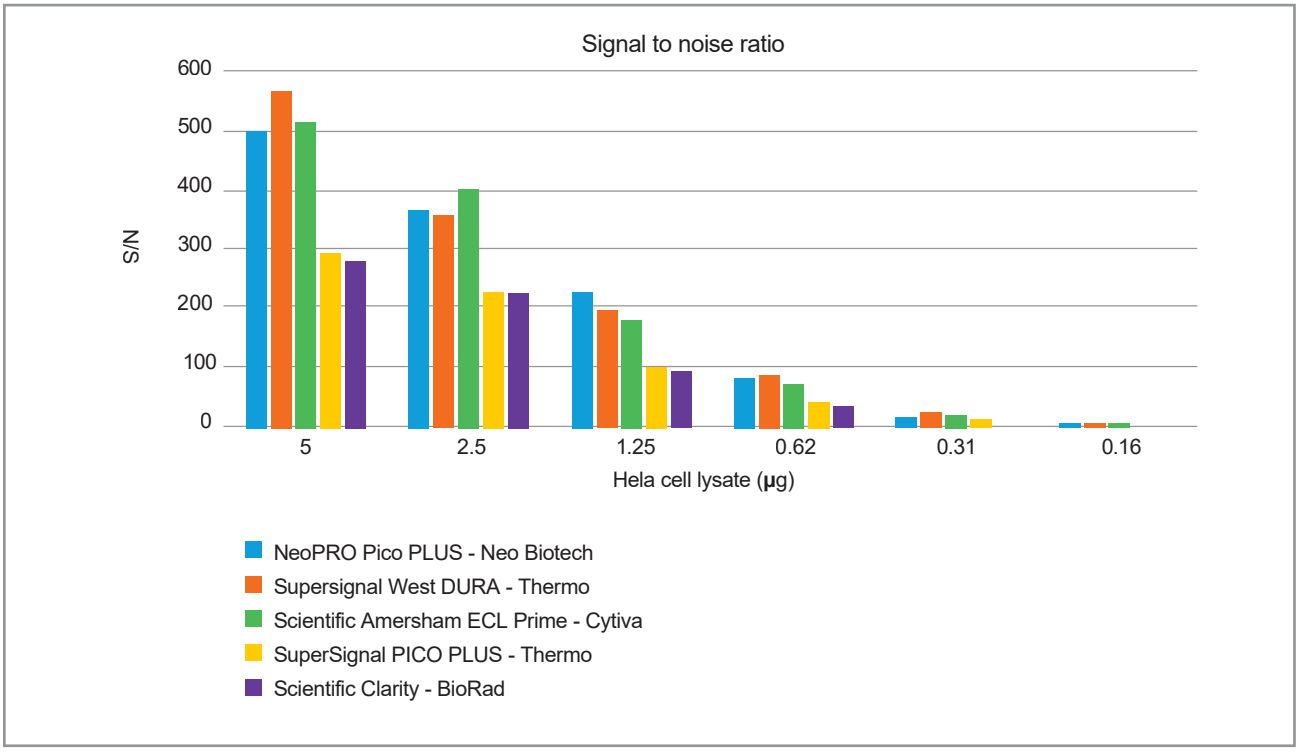
Features	Mid femtogram detection Extended signal duration, up to twenty (20) hours Working solution stable for at least three (3) days High range flexibility
Components	Luminol/enhancer solution (A) Peroxide solution (B)
Antibody Dilution Range	Primary: 1:1.000 - 1:15.000 Secondary: 1:25.000 - 1:150.000 (from 1 mg/mL stock solution)
Available as	2 x 125 mL kit (2500 cm^2 of membrane)
Signal duration	Longer than twenty-four (24) hours
Storage	Stable for one (1) year from delivery at RT The product is shipped at ambient temperature



Western blotting detection of HDAC-1 on HeLa cell lysate with NeoPRO Pico PLUS 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 (Cytiva). Exposure time: 180 seconds.



Extended signal duration of NeoPRO Pico PLUS
For either NeoPRO Pico PLUS or its competitors, exposure time is 180 seconds for each time point (0-2-5-8-11-20 hours).



Signal-to-noise ratio (S/N) analysis of NeoPRO Pico PLUS and its competitors. Triplicate blots for each substrate containing 2-fold dilutions of HeLa whole cell lysate from 5 to 0.016 µg were incubated with Rabbit-anti Human HDAC-1 1:5000 and Goat anti-Rabbit-HRP 1:75000. They were simultaneously imaged for 180 seconds with ImageQuantTM LAS 4000 (Cytiva).

Order Information

PRODUCT	CODE	UNIT SIZE
NeoPRO Pico Western ECL Substrate	NB-78-00003	2x125mL/kit

NeoPRO Femto

Two-Solution ECL Substrate for Western Blotting

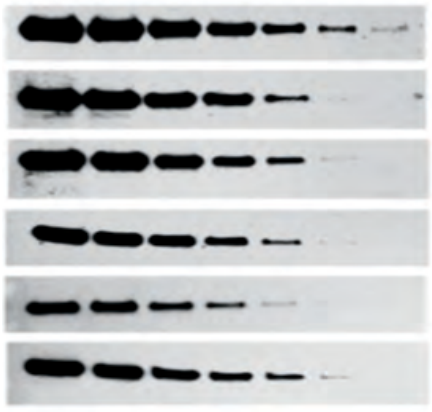
NeoPro Femto is a unique mid/high-level substrate that matches a high sensitivity to an extended signal duration, up to twenty (20) hours, and a broad linear dynamic range, **with no competitor on the market with similar performances.**

Its strong signal combined with a very low background allows a high signal-to-noise ratio for mid/low-femtogram detection levels.

The working solution, prepared by mixing the two components, a luminol/enhancer solution and a peroxide solution, in a one-to-one ratio, is stable for at least three (3) days at room temperature (RT).

Properties

Features	Mid/low femtogram detection The best compromise between high signal intensity Extreme signal duration of up to twenty (20) hours A value-priced mid/top-performer with no competitors on the market Working solution stable for at least three (3) days
Components	Luminol/enhancer solution (A) Peroxide solution (B)
Antibody Dilution Range	Primary: 1:5.000 – 1:50.000 Secondary: 1:50.000 - 1:250.000 (from 1 mg/mL stock solution)
Available as	2 x 50 mL kit (1000 cm^2 of membrane)
Signal duration	> 24 hours
Storage	Stable for one (1) year at RT. The product is shipped at ambient temperature



NeoPro Femto - Neo Biotech

SuperSignal™ West Dura - Thermo Scientific™

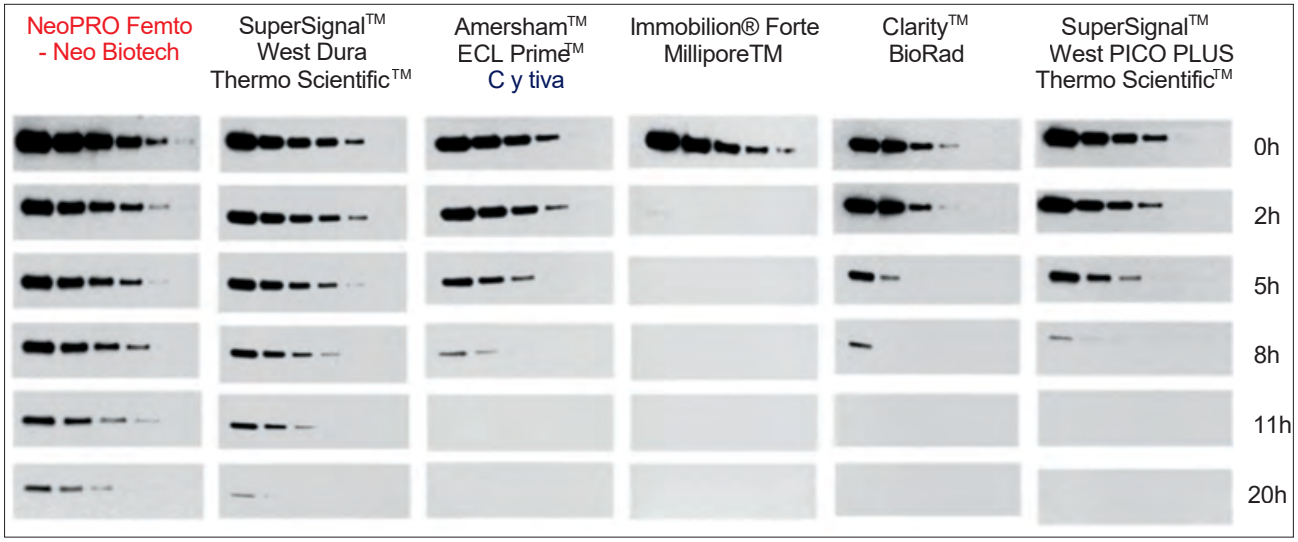
Amersham™ ECL Prime™ - CYTIVA

SuperSignal™ West PICO PLUS - Thermo Scientific™

Clarity™ - BioRad Immobilion®

Forte - Millipore™

Western blotting detection of HDAC-1 on HeLa cell lysate with NeoPro Femto 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 (Cytiva). Exposure time: 180 seconds.



Extended signal duration with NeoPRO Femto.
For either NeoPRO Femto or its competitors, exposure time is 180 seconds for each time point (0-2-5-8-11-20 hours).

Order Information

PRODUCT	CODE	UNIT SIZE
NeoPRO Femto Western ECL Substrate	NB-78-00004	2x50 mL/kit

NeoPRO Femto Plus

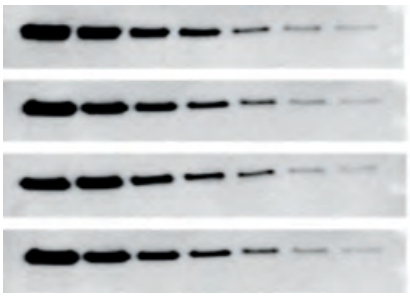
Two-Solution ECL Substrate for Western Blotting

NeoPRO Femto Plus is a top-level, high-performance ECL with exceptional signal intensity, stable light output, low background, and high signal-to-noise ratio for low femtogram detection levels with a broad linear dynamic range.

Its performance, quality and reliability make this substrate one of the most popular top-level substrates worldwide. Several hundred citations show its versatility and widespread use. The working solution, prepared by mixing the two components, a luminol/enhancer solution and a peroxide solution, in a one-to-one ratio, is stable for at least three (3) days at room temperature (RT).

Properties

Features	Low femtogram detection Signal intensity is at least equal to the current top-level competitors Working solution stable for at least three (3) days Low antibody consumption to save your money
Components	Luminol/enhancer solution (A) Peroxide solution (B)
Antibody Dilution Range	Primary: 1:5.000 - 1:100.000 Secondary: 1:100.000 - 1:500.000 (from 1 mg/mL stock solution)
Available as	2 x 50 mL kit (1000 cm^2 of membrane)
Signal duration	11 hours
Storage	Stable for one (1) year at RT The product is shipped at ambient temperature



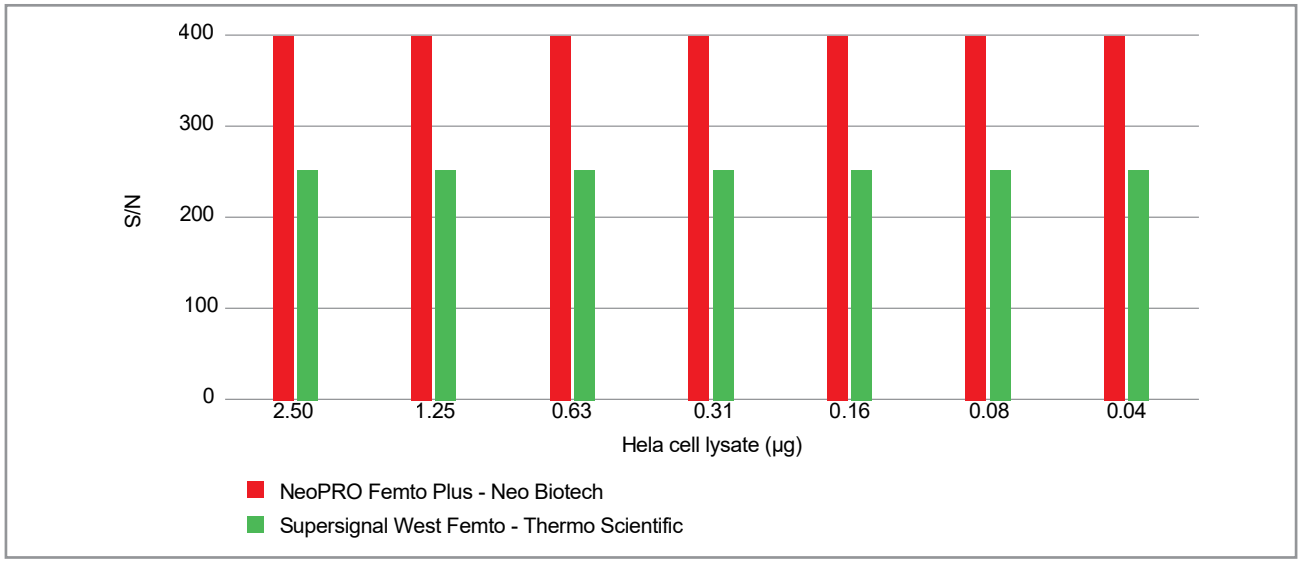
NeoPRO Femto Plus - Neo Biotech

Clarity Max™ - BioRad

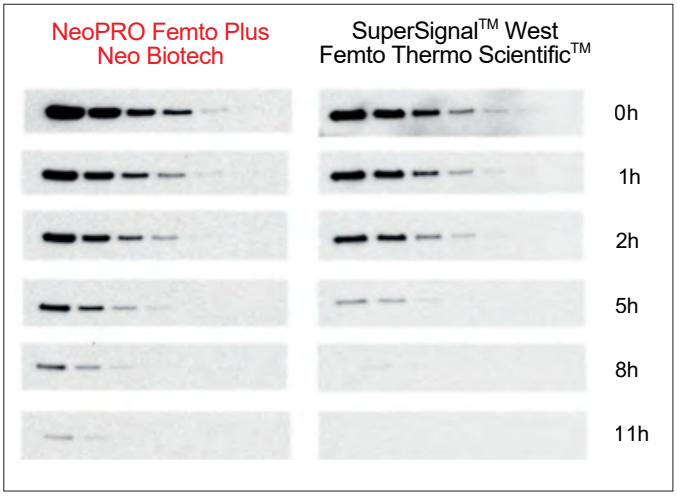
Amersham™ ECL Select™ - CYTIVA

SuperSignal™ West Femto - Thermo Scientific™

Western blotting detection of HDAC-1 on HeLa cell lysate with NeoPRO Femto Plus 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 (Cytiva). Exposure time: 120 seconds.



Low background for highly sensitive detection with NeoPRO Femto Plus. Western blotting detection of HDAC-1 on HeLa cell lysate with NeoPRO Femto Plus compared to SuperSignal™ West Femto - Thermo Scientific™. Triplicate blots containing 2-fold dilutions of HeLa whole cell lysate were incubated with Rabbit-anti Human HDAC-1 1:15000 and Goat anti-Rabbit-HRP 1:300000 and were simultaneously imaged for 120 seconds with ImageQuant™ LAS 4000 (Cytiva). In a Signal-to-noise ratio (S/N) analysis, NeoPRO Femto Plus displays the best combination of sensitivity and signal with low background.



Signal duration of NeoPRO Femto Plus compared to SuperSignal™ West Femto-Thermo Scientific™. Quadruplicate blots for each substrate containing 2-fold dilutions of HeLa whole cell lysate were incubated with Rabbit-anti Human HDAC-1 1:15000 and Goat anti-Rabbit- HRP 1:300000 and were simultaneously imaged with ImageQuant™ LAS 4000 (Cytiva) at time points up to 11 hours post substrate addition.

Order Information

PRODUCT	CODE	UNIT SIZE
NeoPRO Femto Plus Western ECL Substrate	NB-78-00005	2x50 mL/kit

NeoPRO Atto

Two-Solution ECL Substrate for Western Blotting

NeoPRO Atto, with its peculiar, formulation, is the most sensitive substrate on the market to date, allowing attogram detection levels, outperforming all the competitors' top-level substrates.

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

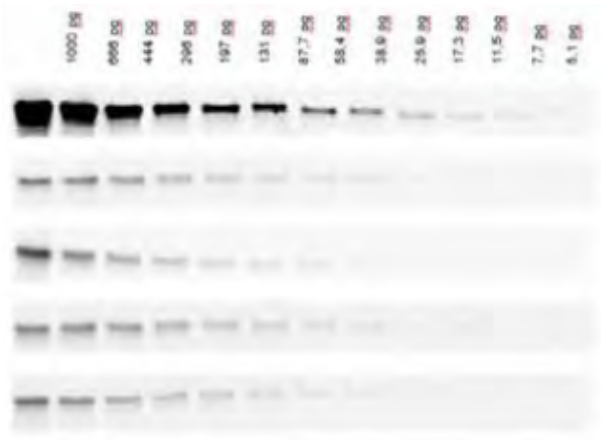
NeoPRO Atto is the best ECL to detect attograms of proteins.

It allows the use of significantly diluted antibodies or the loading of limited amounts of cell lysates, thus saving precious samples and expensive primary antibodies.

NeoPRO Atto permits fast readings, with extreme light emissions for very bright bands in a few seconds of exposure.

Properties

Features	Attogram detection of proteins An extreme significance of the experiment for faint bands Short exposure times Reduced consumption of antibodies and precious samples
Components	Luminol derivative/enhancer solution (A) Peroxide solution (B)
Antibody Dilution Range	Primary 1:10.000-1:200.000 Secondary 1:300.000-1:1.000.000 (from 1 mg/mL stock solution)
Available as	2 x 10 mL kit (200 cm^2 of membrane) 2 x 50 mL kit (1000 cm^2 of membrane)
Signal duration	Five (5) hours
Storage	Stable for one (1) year at RT The product is shipped at ambient temperature



NeoPRO Atto - Neo Biotech

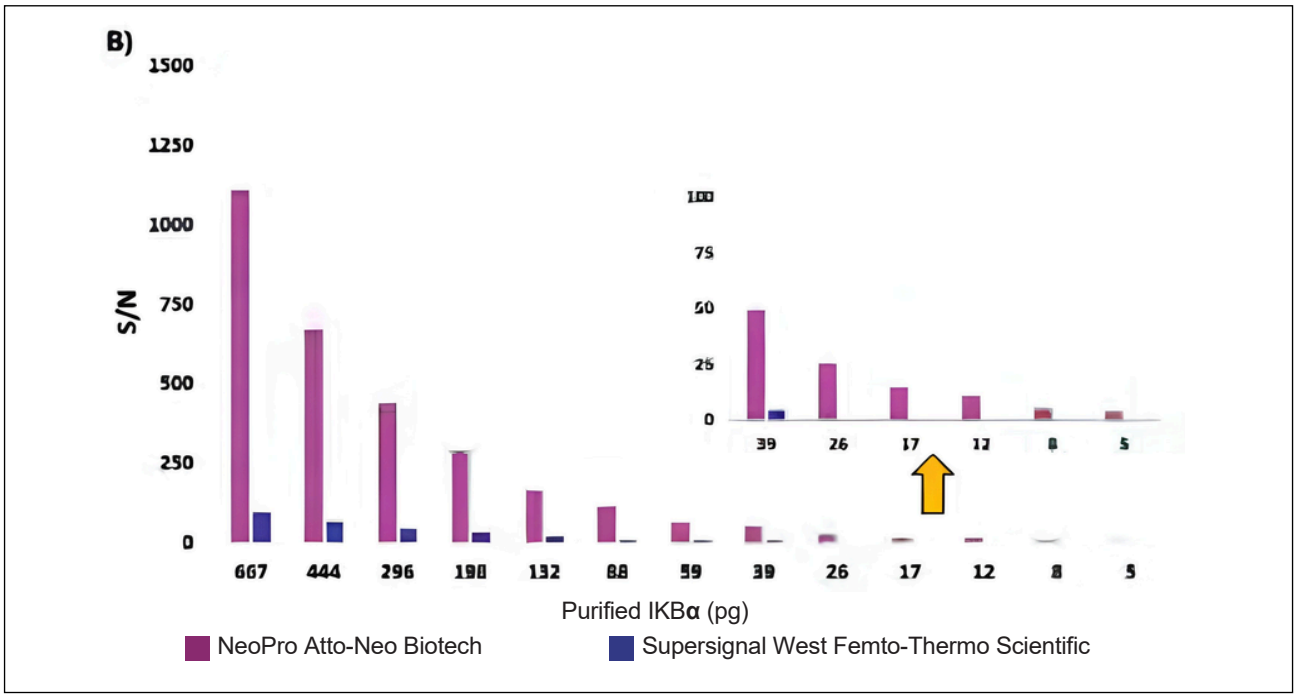
WESTAR ultra femto - Neo Biotech

Clarity Max™ - BioRad

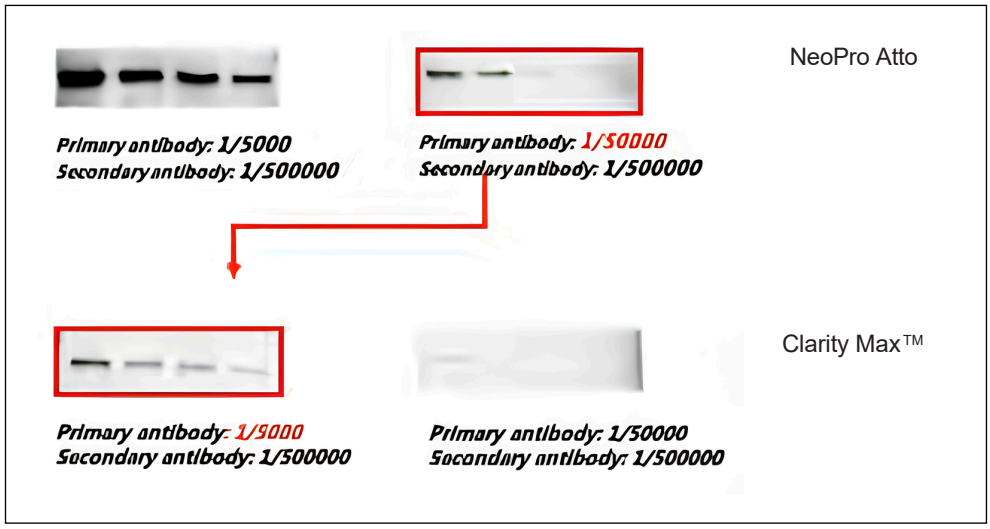
Amersham ECL™ Select™ - CYTIVA

SuperSignal™ Femto - Thermo Scientific

Western blotting detection of purified IKB α
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 - Imager: LAS4000 (GEHC)



Superior sensitivity of NeoPRO Atto
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 (Cytiva).
B) Signal-to-noise ratio (S/N) analysis. The inset enlargement shows the enhanced sensitivity of NeoPRO Atto.



NeoPRO Atto enables the saving of expensive primary antibodies. Triplicate blots containing serial dilutions of purified IKBα were probed with 1:5000 and 1:50000 primary antibody (Rabbit anti- IKBα) dilutions and with 1:500000 secondary antibody (Goat anti-Rabbit-HRP) dilutions and detected with either NeoPRO Atto - Neo Biotech or Clarity Max™ - Bio-Rad. Blots were imaged simultaneously with 60 seconds of exposure times.

Order Information

PRODUCT	CODE	UNIT SIZE
NeoPRO Atto Western ECL Substrate	NB-78-00006-20 NB-78-00006-100 NB-78-00006-10	2x10mL 2x50mL 2x5mL (On request)

NeoPRO RTU

One-Solution ECL Substrate for Western Blotting

NeoPRO RTU is the proprietary, line of ECL substrates for Western blotting in one solution. The premixed working solutions are ready for use and provide a fast and accurate immunoassay with convenience and increased consistency in the results, avoiding pipetting errors and possible contaminations.

The line includes three products with different levels of sensitivity, from picograms to low femtograms, covering all detection needs. NeoPRO RTU EXTREME is the only real top-performer in one solution on the market, with performance that matches competitors' two-solution top-level substrates.

Shipping is at Room Temperature (15–25°C - RT), storage is at 2-8°C and the shelf life is one (1) year at 2-8°C from delivery.

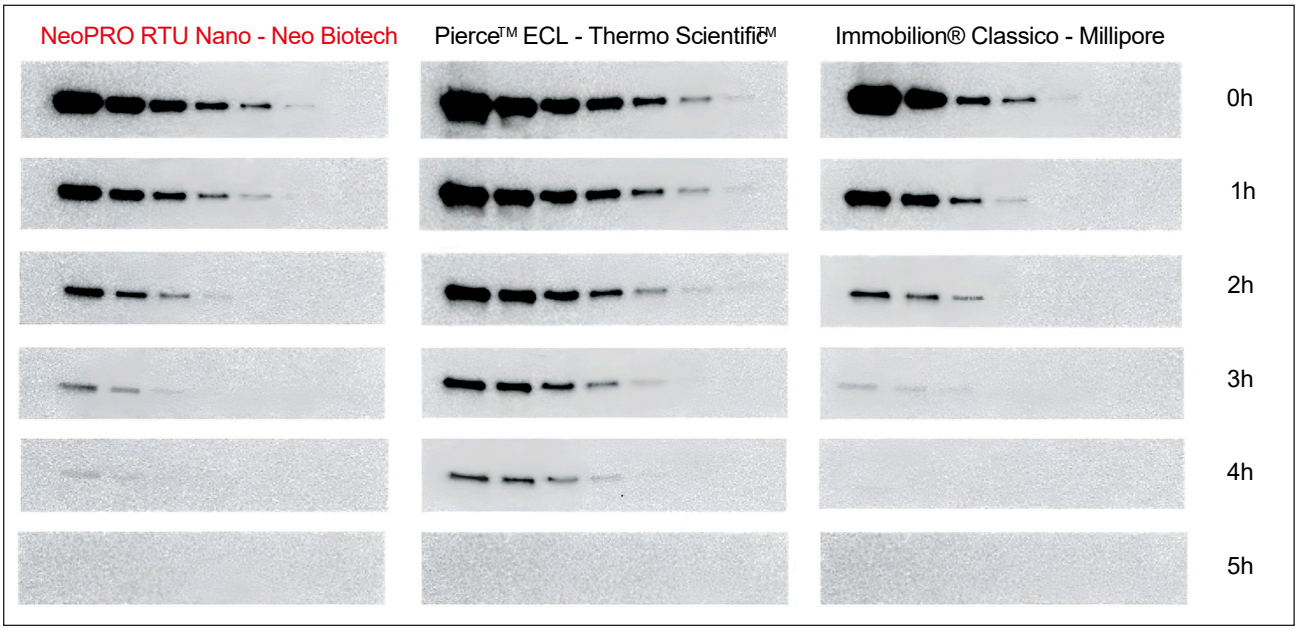
Features

- Compatible with all chemiluminescence imagers and X-ray film detection
- Well-suited for different types of membranes and blocking reagents, as well as a wide range of antibody dilutions
- Optimised for attaining a low background and high signal-to-noise ratio

Application

- Western Blotting

PRODUCT	COMPETITORS	WHEN TO USE
NeoPRO RTU Nano **Cod. NB-78-00007**	WESTERN LIGHTNING™ ONE PICO - REVVITY AMERSHAM™ ECL START™ - CYTIVA IMMOBILON® CLASSICO - MILLIPORE™ AMERSHAM™ ECL™ - CYTIVA PIERCE™ ECL-THERMO SCIENTIFIC™ WESTERN LIGHTNING™ ONE FEMTO - REVVITY	Mid-picogram detection
NeoPRO RTU Pico **Cod. NB-78-00008**	AMERSHAM™ ECL PRIME™ - CYTIVA IMMOBILON® CRESCENDO - MILLIPORE™ CLARITY™ - BIO-RAD SUPERSIGNAL™ WEST DURA - THERMO SCIENTIFIC ™ SUPERSIGNAL™ WEST PICO PLUS - THERMO SCIENTIFIC ™ WESTERNBRIGHT™ QUANTUM™ - ADVANSTA	Mid-femtogram detection
NeoPRO RTU Femto **Cod.NB-78-00009**	WESTERN LIGHTNING™ ONE FEMTO ULTRA - REVVITY CLARITY MAX™ - BIO-RAD AMERSHAM™ ECL SELECT™ - CYTIVA WESTERN LIGHTNING™ ULTRA – REVVITY IMMOBILON® FORTE - MILLIPORE™ SUPERSIGNAL™ WEST FEMTO – THERMO SCIENTIFIC™ WESTERNBRIGHT™ SIRIUS™ - ADVANSTA	Low-femtogram detection



Western blotting detection of HDAC-1 on HeLa cell lysate.
For NeoPRO RTU Nano and its competitors, exposure time is 120 seconds for each time point (0-1-2-3-4-5 hours).

Order Information

PRODUCT	CODE	UNIT SIZE
NeoPRO RTU Nano - Ready to Use Western ECL Substrate	NB-78-00007	250mLkit

NeoPRO RTU Pico

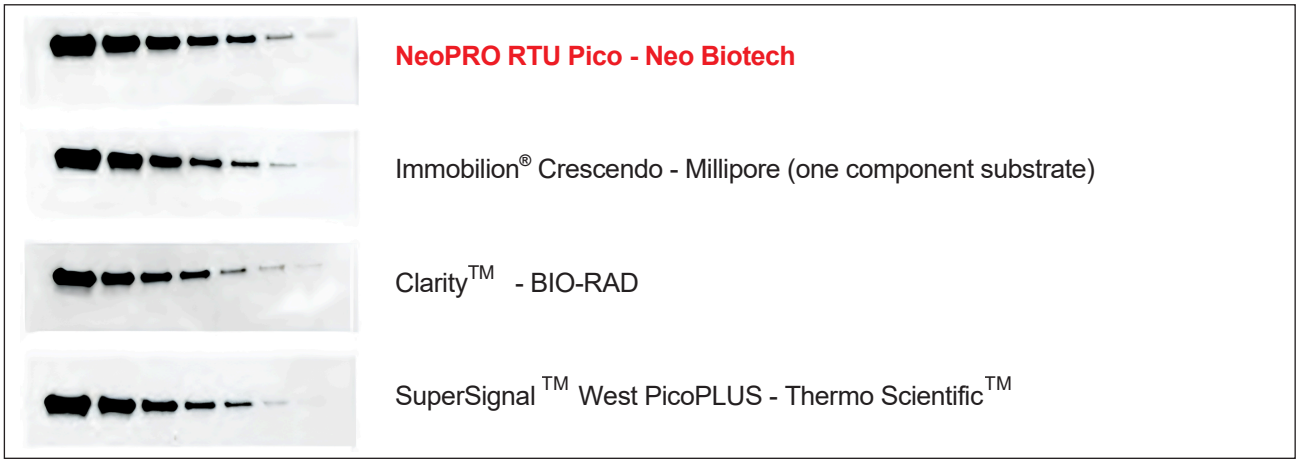
One-Solution ECL Substrate for Western Blotting

NeoPRO RTU Pico is a versatile pre-mixed chemiluminescent HRP substrate for mid-femtogram detection level in Western Blotting. Its high signal intensity and broad linear dynamic range allow an accurate quantification of both low and high-abundance proteins in the same experiment.

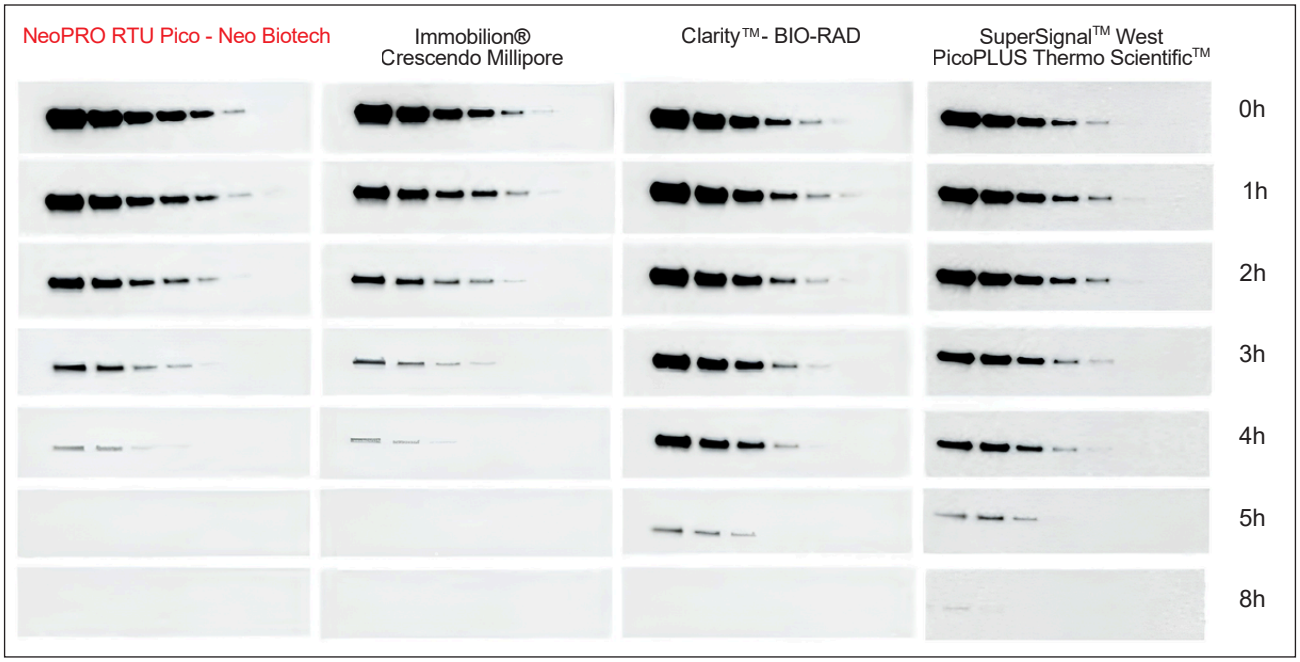
Shipping is at Room Temperature (15–25°C - RT), storage is at 2-8°C and the shelf life is one (1) year at 2-8°C from delivery.

Properties

Features	Mid-femtogram detection No mixing required Compatible with a wide range of antibody dilutions Ready-to-use at RT
Components	Luminol derivative/enhancer/peroxide solution
Antibody Dilution Range	Primary: 1:1000 - 1:15000 Secondary: 1:25000 - 1:150000 (from 1 mg/mL stock solution)
Available as	250 mL kit (2500 cm^2 of membrane)
Signal duration	Four (4) hours
Shipping & Storage	Shipping at RT, Stable for one (1) year at RT



Western blotting detection of HDAC-1 on HeLa cell lysate with NeoPRO RTU Pico and its competitors.
Sample: Two-fold dilution series of HeLa whole cell lysate (abcam®) from 5 µg to 0.078 µg of total protein
Primary antibody: Rabbit-anti Human HDAC-1 (abcam®) 1:5000
Secondary antibody: Goat anti-rabbit IgG HRP (2mg/mL) (abcam®) 1:75000
Imaging: ImageQuant™ LAS 4000 (Cytiva). Exposure time: 120 seconds



Western blotting detection of HDAC-1 on HeLa cell lysate.
For either NeoPRO RTU Pico and its competitors, exposure time is 120 seconds for each time point (0-1-2-3-4-5-8 hours).

Order Information

PRODUCT	CODE	UNIT SIZE
NeoPRO RTU Pico - Ready to Use Western ECL Substrate	NB-78-00008	250mLkit

NeoPRO RTU Femto

One-Solution ECL Substrate for Western Blotting

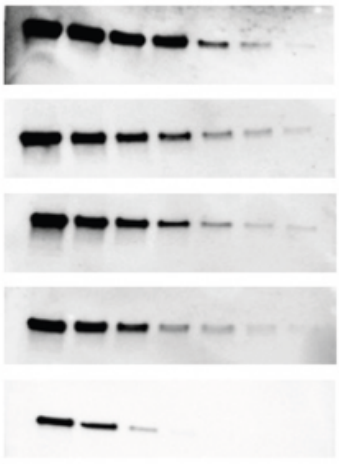
NeoPRO RTU Femto is the top performer of the WESTAR-ONE line of premixed chemiluminescent HRP substrate for Western blotting. Its high sensitivity, allowing low-femtogram detections, makes it the only top-level substrate with performance that matches competitors' two-solution top-level substrates.

The excellent signal intensity allows the detection of very low amounts of proteins while reducing the amount of antibody needed.

Shipping is at Room Temperature (15–25°C - RT), storage is at 2-8°C and the shelf life is one (1) year at 2-8°C from delivery.

Properties

Features	Low-femtogram detection No mixing is required Low antibody consumption to save your money Ready-to-use at RT
Components	Luminol derivative/enhancer/peroxide solution
Antibody Dilution Range	Primary: 1:5000 - 1:100000 Secondary: 1:100000 - 1:500000 (from 1 mg/mL stock solution)
Available as	125 mL kit (1250 cm^2 of membrane)
Signal duration	Two (2) hours
Shipping & Storage	Shipping at RT, Stable for one (1) year at RT



NeoPRO RTU Femto - Neo Biotech

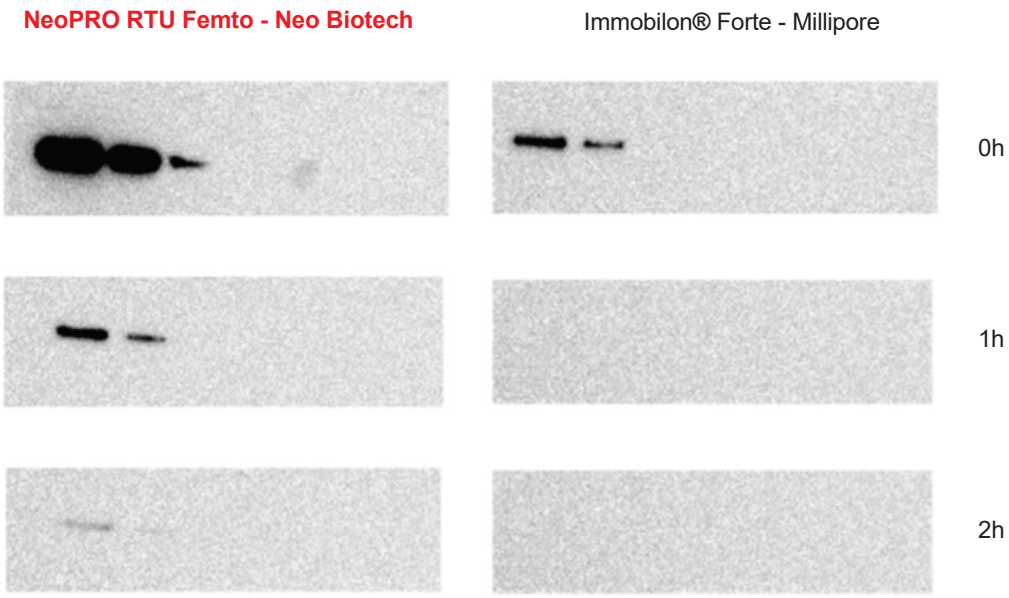
Amersham™ ECL Select™ - CYTIVA

Clarity Max™ - BIO-RAD

SuperSignal™ West Femto - Thermo Scientific ™

Immobilon® Forte - Millipore (one-component substrate)

Western blotting detection of HDAC-1 on HeLa cell lysate with NeoPRO RTU Femto and its competitors.
Sample: Two-fold dilution series of HeLa whole cell lysate (abcam®) from 2,5 µg to 0.039 µg of total protein
Primary antibody: Rabbit-anti Human HDAC-1 (abcam®) 1:10000
Secondary antibody: Goat anti-rabbit IgG HRP (2mg/mL) (abcam®) 1:200000
Imaging: ImageQuant™ LAS 4000 (Cytiva). Exposure time: 120 seconds



Western blotting detection of HDAC-1 on HeLa cell lysate.
Exposure time is 120 seconds for each time point (0-1-2 hours) for NeoPRO RTU Femto and its competitors.

Order Information

PRODUCT	CODE	UNIT SIZE
NeoPRO RTU Femto - Ready to Use Western ECL Substrate	NB-78-00008	250mLkit

NeoLume™ ECL Tablet Substrate

ECL Substrate in Tablets for Western Blotting

NeoLume™ ECL Tablet Substrate is a unique, innovative product line of ECL substrates for Western blotting in a single-use tab format. Designed to be compact and light, with sustainable water use and no possible contamination of the solutions before use, NeoLume™ ECL Tablet Substrate represents a cutting-edge approach to ecological and responsible Western blotting.

The NeoLume™ ECL Tablet Substrate concept allows sensible reductions in the use of paper (-72%) and plastics (-81%) compared to the equivalent kit in liquid format. This minimal kit is more compact, 74% smaller, and 85% lighter, leading to a decrease in CO2 emissions in the kit distribution. Optimisation in water use, a fundamental aspect of the green approach, is another target of this format. Dedicated and limited pure water use in each lab at the moment of the test replaces a single large production of ultra-pure water at the manufacturing facility. Sustainable and waste-free sharing in the exploitation of this vital commodity is possible.

The kit consists of twenty tabs of peroxide solution and twenty tabs of luminol solution, equivalent to a one- hundred millilitre (100 mL) kit in liquid format. Two tablets, one per solution, dissolved in five (5) millilitres of pure water, are valid for a fifty (50) cm2 membrane. Dissolving takes less than ten (10) minutes on a shaker and can be carried out while secondary antibodies are incubated, not affecting the test timing. The shelf life is one year at 2-8°C from delivery, and shipping conditions are at RT (15–25°C).

Features

Saving compared to liquid formats	
Paper	-72%
Plastics	-81%
total weight	-85%
packaging volume	-74%



The product line currently includes a top-performing product, NeoLume™ ECL Tablet Substrate – Ultra Sensitivity, whose performance is comparable to all the competitors' top-level ECL substrates. A mid-level kit, with extended signal duration, NeoLume™ ECL Tablet Substrate EXTEND, will be added shortly to the product line.

Application

- Western Blotting

Order Information

PRODUCT	CODE	UNIT SIZE
NeoLume™ ECL Tablet Substrate – Ultra Sensitivity	NB-78-00029	20tests

NeoLume™ ECL Tablet Substrate – Ultra Sensitivity-

ECL Substrate in TABLETS for Low-Femtogram Detection

NeoLume™ ECL Tablet Substrate – Ultra Sensitivity is a unique and innovative ultra-sensitive substrate in tablet format. It features outstanding signal intensity, low background, and stable light output at the low-femtogram level.

NeoLume™ ECL Tablet Substrate – Ultra Sensitivity exhibits top-level performance for the most challenging Western blotting applications. With its exceptionally high signal-to-noise ratio, this substrate is capable of detecting very low amounts of proteins.

The kit is sized for twenty (20) single uses.

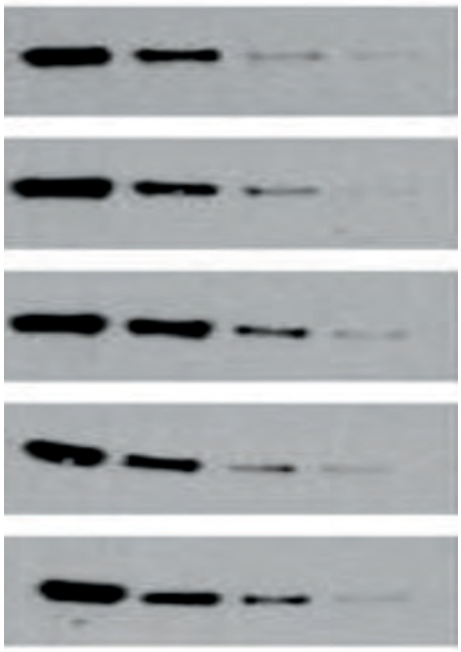
One (1) tablet of luminol solution and one (1) tablet of peroxide solution, dissolved in five (5) millilitres of pure water, are valid for a 50 cm^2 membrane. The kit size equals a one-hundred (100) millilitre kit in liquid format. Dissolving takes less than ten (10) minutes on a standard shaker and can be carried out while secondary antibodies are inc ubate d .

Properties

Features	Unique and innovative ultra-sensitive substrate in tablet format Compact and light, with sustainable water use and no possible contamination New, innovative single-use tab format for ECL for Western blotting Designed for ecological, responsible technology Direct substitute for any competitors' top-performing substrates No change in the protocol is required in replacing the competitor
Components	Luminol/enhancer TABLETS (A) Peroxide TABLETS (B)
Antibody Dilution Range	Primary: 1:5.000 - 1:100.000 Secondary: 1:100.000 - 1:500.000 (from 1 mg/mL stock solution)
Available as	2 rxn - Trial Size (equivalent to 10 mL) 20 rxn (equivalent to 100 mL)
Storage	Stable for 1 year at 2-8°C Product is shipped at RT (15–25°C)

Order Information

PRODUCT	CODE	UNIT SIZE
NeoPRO RTU Femto - Ready to Use Western ECL Substrate	NB-78-00029	20 tests



NeoLume™ ECL Tablet Substrate – Ultra Sensitivity - Neo Biotech

SUPERSIGNAL™ WEST FEMTO - Thermo Scientific™

WESTAR ultra femto - Neo Biotech

CLARITY MAX ™ - Bio-Rad

AMERSHAM™ ECL SELECT ™ - CYTIVA

Western blotting detection of HDAC-1 on HeLa cell lysate with NeoLume™ ECL Tablet Substrate – Ultra Sensitivity
Compared to other chemiluminescent reagents in the same sensitivity range.
Sample: 2-fold dilution series of HeLa whole cell lysate (abcam®) from 2.5µg to 0.039 µg of total protein. Membrane: Trans-Blot® Turbo™ Mini Nitrocellulose Transfer Packs (Bio-Rad). Blocking: 2% ECL™ Blocking Agent (Cytiva) in PBS-T.

NeoLume Chemiluminescent Substrates

for CLIA Immunoassay Manufacturers

NeoLume are lines of chemiluminescent substrates for horseradish peroxidase (HRP) based immunoassays dedicated to CLIA kit manufacturers.

Chemiluminescent substrates are ideal for the development of chemiluminescent immunoassays and are most recommended for quantitative assays with an extended dynamic range or qualitative assays requiring the best achievable detection limit. The bright signal can be measured immediately within one minute, avoiding long incubations or the addition of stopping reagents, as needed by the traditional colourimetric assays.

NeoLume substrates are available in kit format and bulk.

The proprietary, technology enables the fine-tuning of signal intensity. Special custom substrates can be defined based on assay manufacturers' sensitivity needs.

NeoLume is a product line of six different substrates in a two-solution format, from mid-picograms to attograms, offering a wide range of choices. These substrates provide easy-to-use formats with outstanding performance, allowing for excellent sensitivity, specificity, signal stability, and lot-to-lot consistency.

All **NeoLume substrates are formulated in order to assure negligible lot-to-lot variations**, thus minimising assay re-optimisation and ensuring reproducibility. These substrates' working solutions are stable at room temperature (RT) for at least three (3) days, ensuring reproducibility. Two substrates of the NeoLume product line, **NeoLume Very High Sensitivity** and **NeoLume Ultra Sensitivity**, offer an extended signal duration, up to twenty (20) hours.

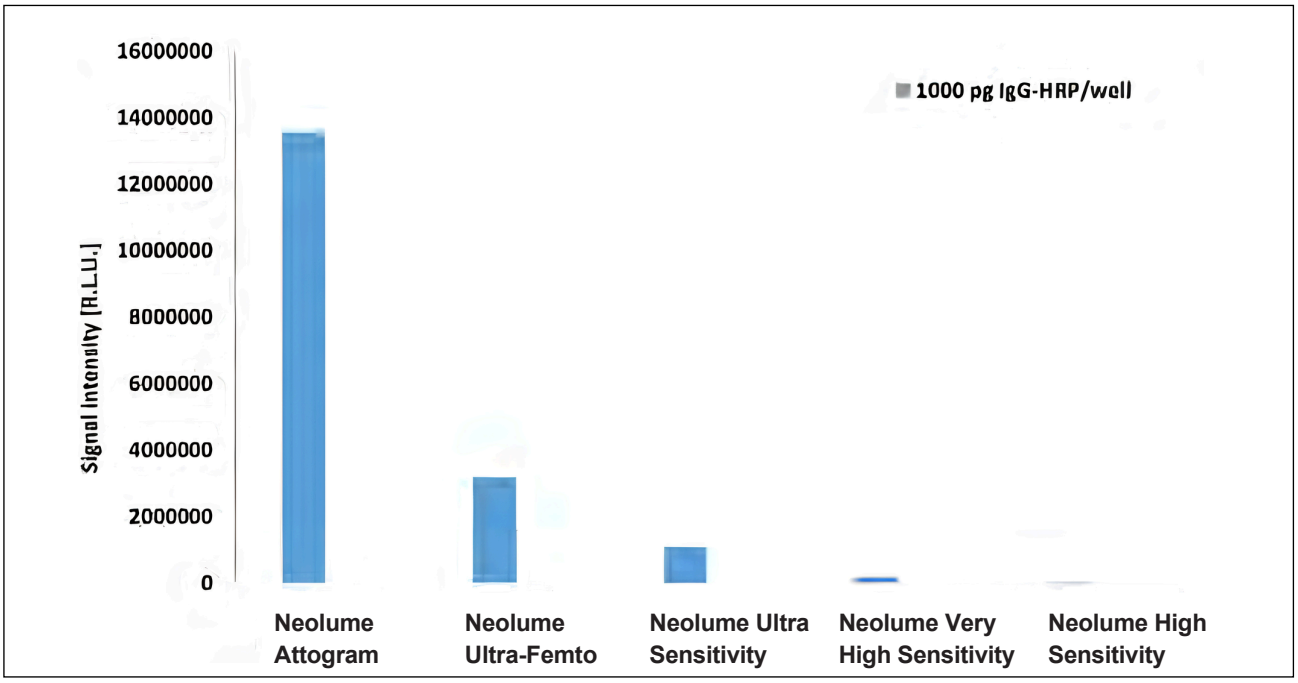
Among the NeoLume family, the most potent option for superior sensitivity is NeoLume Attogram Sensitivity, which is currently the brightest ECL substrate on the market. Based on a specific , proprietary technology, **NeoLume Attogram** Sensitivity, with its extreme sensitivity and extraordinary light output, allows the detection of trace amounts of proteins (attograms). The formulation provides a negligible background for an extremely high signal- to-noise ratio.

Features

- Availability of different levels of sensitivity
- High lot-to-lot consistency
- Stable working solution
- Negligible lot-to-lot variations
- Storage at room temperature
- Excellent signal stability

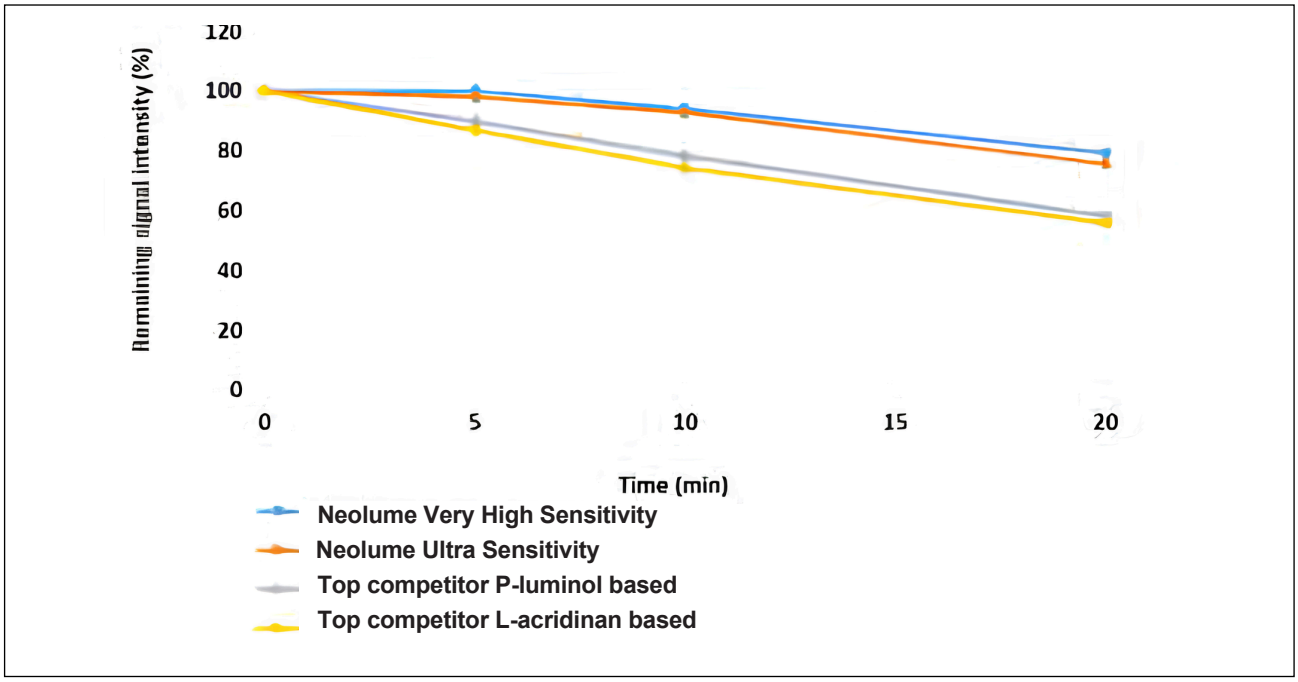
Application

- CLIA

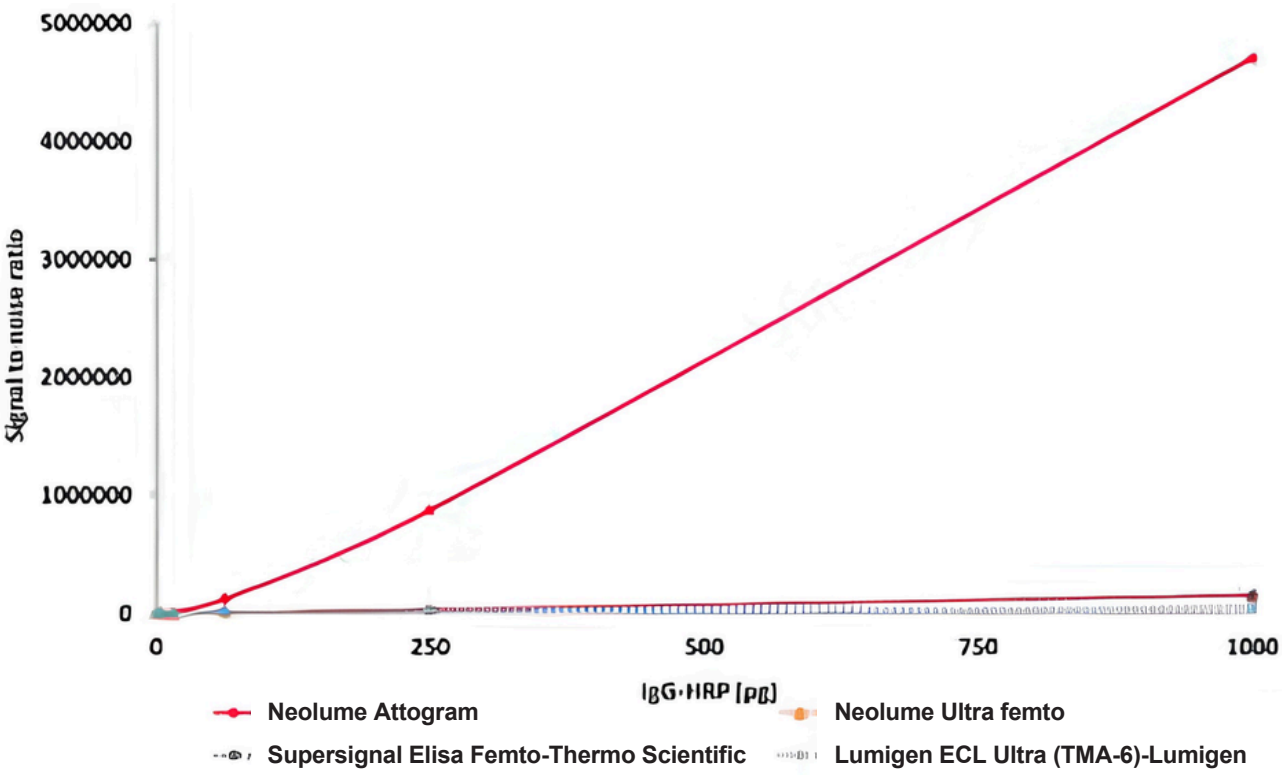


Different signal intensities with the NeoLume family.

IgG-HRP was added to 200 µL of each NeoLume substrate at a final concentration of 1000 pg/well. Data are the mean of at least twelve replicates. Reader: Victor3 microplate reader (Perkin Elmer).



Signal stability of NeoLume Very High Sensitivity and NeoLume Ultra Sensitivity. Luminescence was recorded with 1 sec integration time 5, 10 or 20 min after the addition of IgG-HRP at a final concentration of 1000 pg/well. Luminometer: Victor3 microplate reader (Perkin Elmer)



NeoLume Attogram Sensitivity provides the highest signal-to-noise ratio compared to the top performer substrates.

Four-fold dilutions of IgG-HRP (from 1000 to 0,038 pg/well) were added to either 200 µL of NeoLume Attogram Sensitivity, NeoLume ultra femto, Supersignal Elisa Femto-Thermo Scientific or Lumigen ECL Ultra (TMA-6)-Lumigen. Data are the mean of at least six replicates. Reader: Victor3 microplate reader (Perkin Elmer).

Order Information

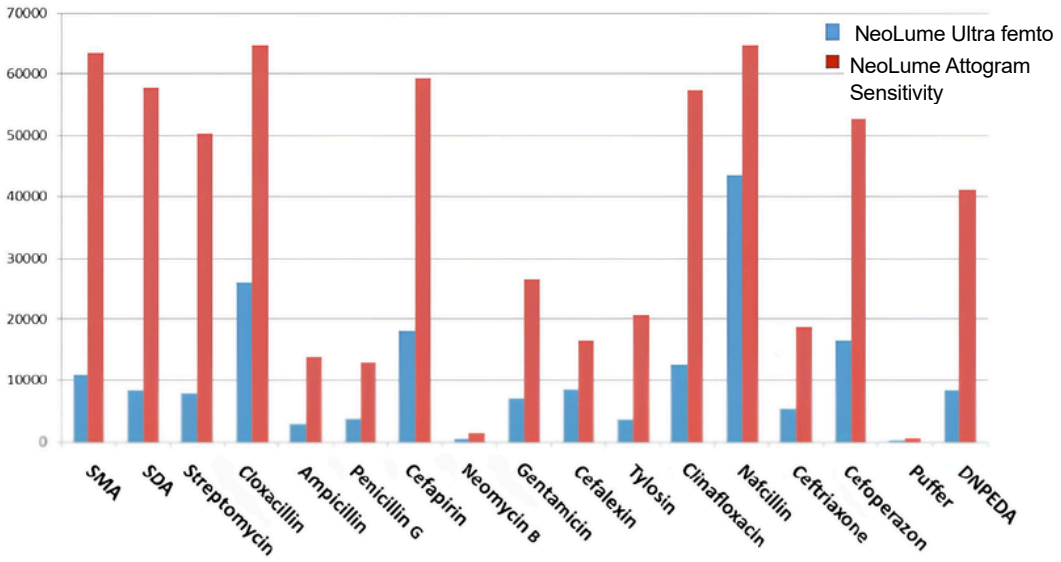
PRODUCT	CODE	Assay sensitivity
NeoLume™ ECL Substrate – High Sensitivity	NB-78-00023	Sensitive (low picograms)
NeoLume™ ECL Substrate – Very High Sensitivity	NB-78-00024	Very Sensitive (mid femtograms)
NeoLume™ ECL Substrate – Ultra Sensitivity	NB-78-00025	Super Sensitive (mid-low femtograms)
NeoLume™ ECL Substrate – Ultra-Femto	NB-78-00026	Ultra Sensitive (low femtograms)
NeoLume™ ECL Substrate – Attogram Sensitivity	NB-78-00028 (2x50ml) NB-78-00027 (10+10ml)	Extremely Sensitive (attograms)

NeoLume Attogram Sensitivity

The most sensitive chemiluminescent (two solutions) substrate for CLIA Immunoassay Manufacturers

NeoLume Attogram Sensitivity is the brightest ECL substrate on the market for the detection of horseradish peroxidase (HRP) based immunoassay.

Based on a new proprietary, technology, NeoLume Attogram Sensitivity, with its extreme sensitivity and extraordinary light output, allows the detection of trace amounts of proteins (attograms). The formulation provides a low background for an extremely high signal-to-noise ratio to enhance the accuracy of the CLIA test. When extreme sensitivity is critical to success, NeoLume Attogram Sensitivity is the best choice to analyse limited or difficult- to-detect protein samples.

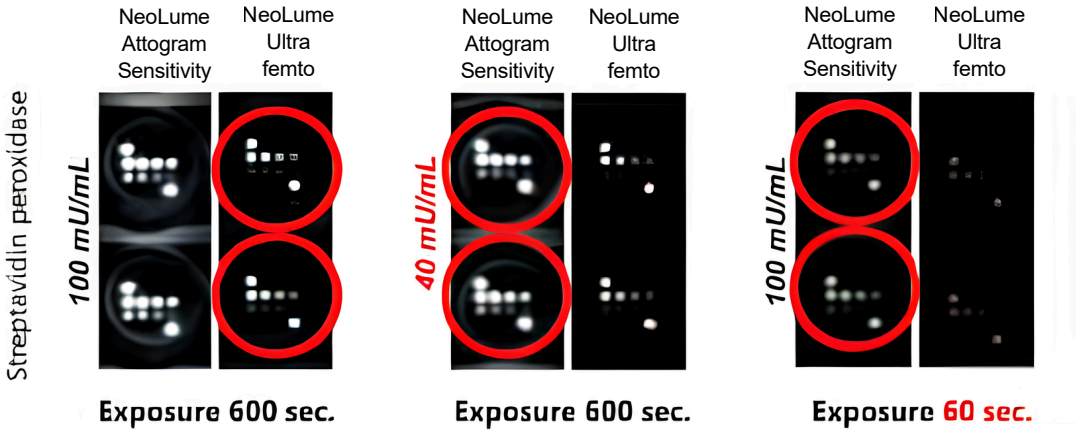


NeoLume Attogram Sensitivity: monitoring of antibiotic residues in milk with the biosensor system MCR 3. Data kindly provided by MPR Milchprüfring Bayern e. V. (Bavarian association for raw milk testing).

NeoLume Attogram Sensitivity, with its negligible background, has an exceptional signal-to-noise ratio, enabling a more precise interpretation of extremely low concentrations of the analyte. Chemiluminescence immunoassay is more sensitive than the conventional colourimetric method(s), providing for faster protocols and less reagent c onsump tion .

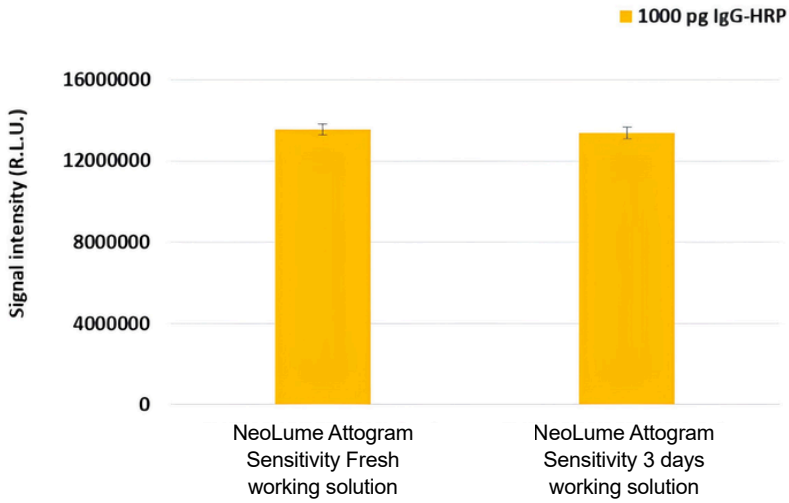
NeoLume Attogram Sensitivity can be successfully used in high-throughput enzymatic immunoassays run on a microplate chemiluminescence reader. Thanks to its strong, immediate light output after the addition of the substrate, it reaches the maximum signal intensity within one minute.

NeoLume Attogram Sensitivity takes advantage of using very low concentrations of antigens/antibodies to obtain an exceptional signal intensity with low background.



Microchip CLIA detection of biotinylated BSA.
NeoLume Attogram Sensitivity produces a higher signal detected in a shorter time than NeoLume ultra femto and allows for the detection of a smaller amount of target protein with higher signal intensity. Data kindly provided by Seramun Diagnostica GmbH.

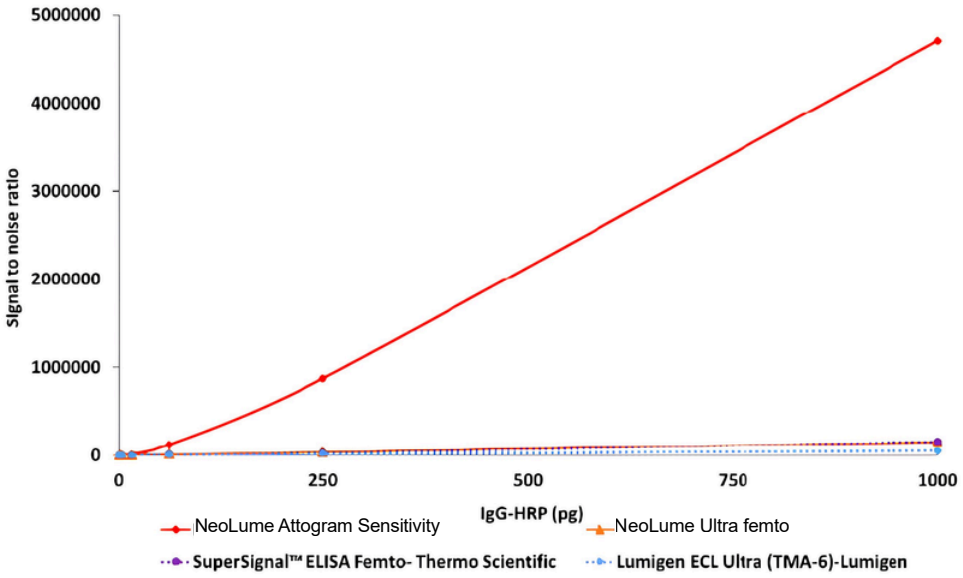
NeoLume Attogram Sensitivity is formulated to ensure negligible lot-to-lot variations, thus minimising assay re-optimisation and ensuring reproducibility.
NeoLume Attogram Sensitivity substrates have excellent working solution stability. The working solution is stable at four degrees (4°C) for at least three (3) days, with a loss in signal intensity of less than 3%.



200 µL of NeoLume Attogram Sensitivity fresh working solution added to a 96–well black plate.
IgG-HRP at a concentration of 1000 pg/well was added to each well. Reading with Victor3 microplate reader (Perkin Elmer). The working solution was stored in an amber bottle at + 4°C.

Properties

Features	Attogram detection level Maximised sensitivity Reduction in assay time and precious reagents High lot-to-lot consistency
Components	Luminol derivative/enhancer solution (A) Peroxide solution (B)
Antibody Dilution Range	Primary 1:10.000-1:200.000 Secondary 1:300.000-1:1.000.000 (from 1 mg/mL stock solution)
Available as	2 x 10 mL kit (200 cm2 of membrane) 2 x 50 mL kit (1000 cm2 of membrane)
Signal duration	Five (5) hours
Storage	Stable for one (1) year at room temperature (RT) The product is shipped at ambient temperature



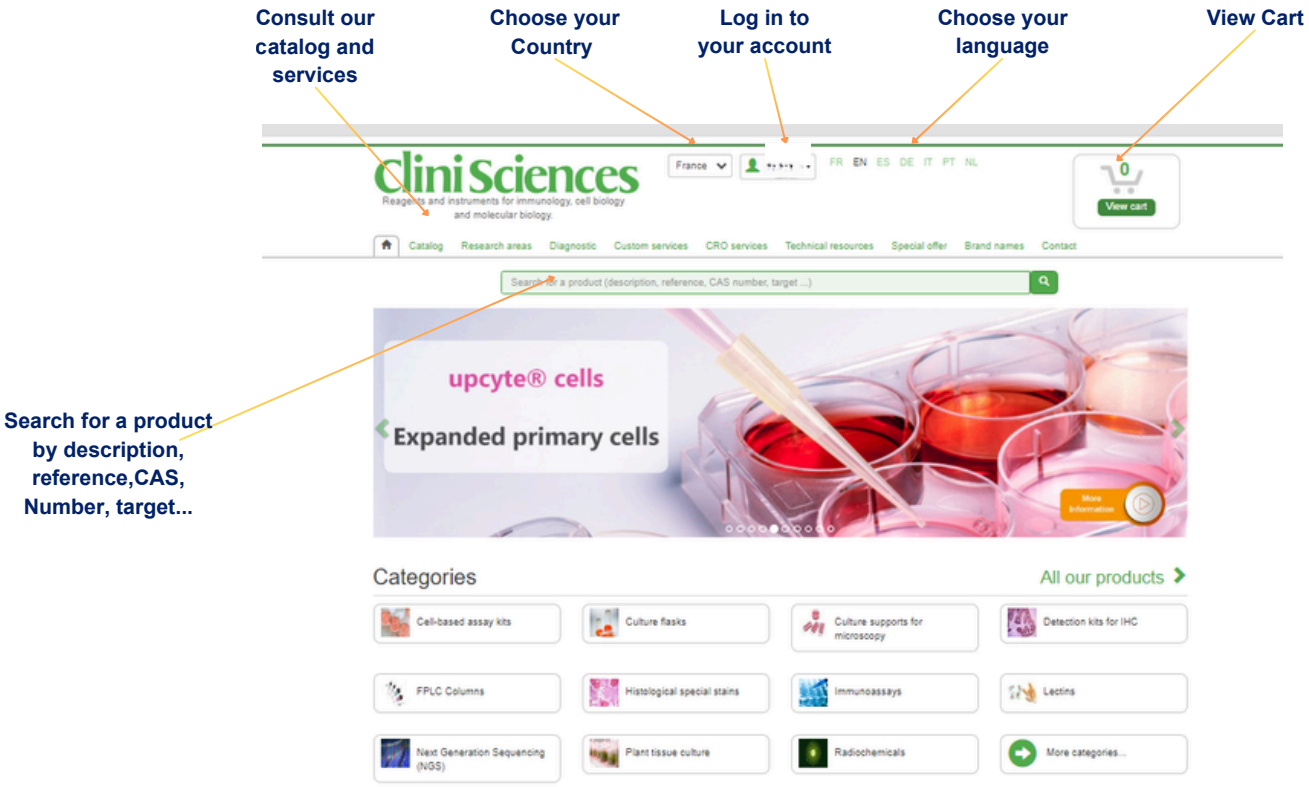
NeoLume Attogram Sensitivity provides the highest signal-to-noise ratio compared to the top performer substrates. Four-fold dilutions of IgG-HRP (from 1000 to 0,038 pg/well) were added to either 200 µL of NeoLume Attogram Sensitivity, NeoLume ultra femto, Supersignal Elisa Femto-Thermo Scientific or Lumigen ECL Ultra (TMA-6)-Lumigen. Data are the mean of at least six replicates. Reader: Victor3 microplate reader (Perkin Elmer).

Order Information

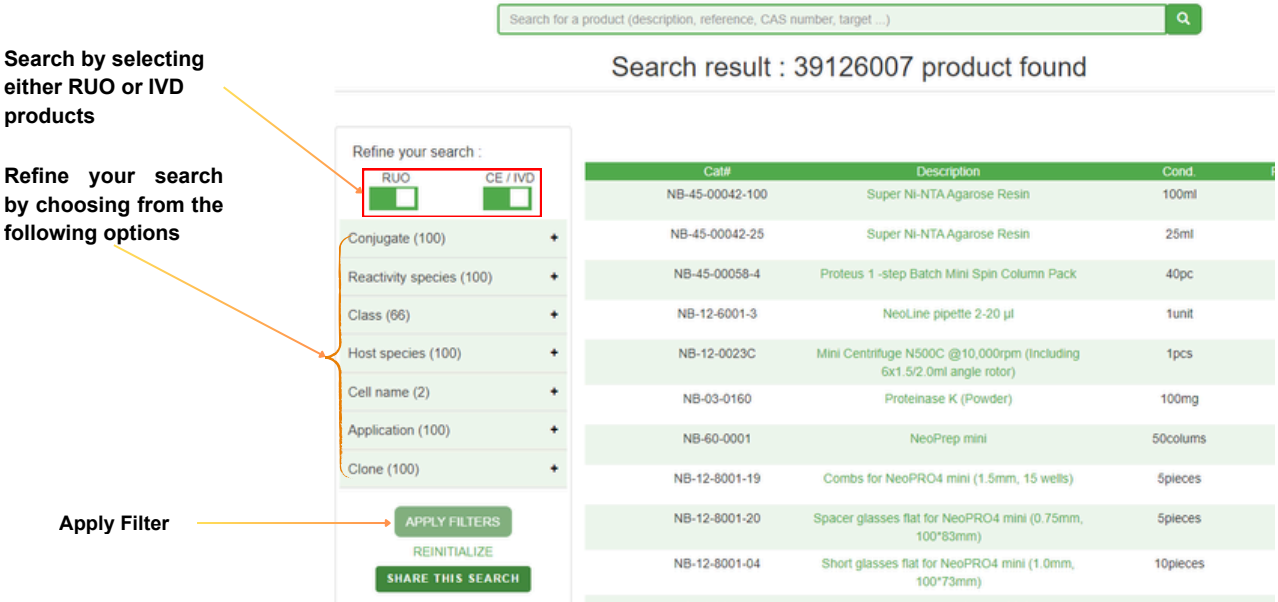
PRODUCT	CODE	Assay sensitivity
NeoLume™ ECL Substrate – Attogram Sensitivity	NB-78-00028 (2x50ml) NB-78-00027 (10+10ml)	Extremely Sensitive (attograms)

How to navigate through our website?

Homepage: When you first visit our website, you'll land on the homepage. This is where you can find an overview of our services, products, or any important announcements. From here, you can navigate to other sections of the website.



Search Bar: Look for specific Products and equipment



"Remember, if you ever get lost or have questions, don't hesitate to reach out to our customer support team. They're here to help you address any concerns you may have."

cliniSciences

Contact Our Global Network

LOCAL SUPPORT | GLOBAL EXPERTISE

SCIENCE DRIVEN

CUSTOMER FOCUSED

A STRONG INTERNATIONAL PRESENCE

Austria

Company: CliniSciences GmbH
Address: Sternwartestrasse 76, A-1180 Wien - Austria
Telephone: +43 720 115 580
Fax: +43 720 115 577
Email: oesterreich@clinisciences.com
Web: https://www.clinisciences.com

Belgium

Company: CliniSciences S.R.L
Address: Avenue Stalingrad 52, 1000 Brussels - Belgium
Telephone: +32 2 31 50 800
Fax: +32 2 31 50 801
Email: belgium@clinisciences.com
Web: https://www.clinisciences.com

Denmark

Company: CliniSciences ApS
Address: Oesterbrogade 226, st. 1, Copenhagen, 2100 - Denmark
Telephone: +45 89 888 349
Fax: +45 89 884 064
Email: danmark@clinisciences.com
Web: https://www.clinisciences.com

Finland

Company: CliniSciences ApS
Address: Oesterbrogade 226, st. 1, Copenhagen, 2100 - Denmark
Telephone: +45 89 888 349
Fax: +45 89 884 064
Email: suomi@clinisciences.com
Web: https://www.clinisciences.com

France

Company: CliniSciences S.A.S
Address: 74 Rue des Suisses, 92000 Nanterre- France
Telephone: +33 9 77 40 09 09
Fax: +33 9 77 40 10 11
Email: info@clinisciences.com
Web: https://www.clinisciences.com

Germany

Company: CliniSciences GmbH
Address: Wilhelm-Mauser-Str. 41-43, 50827 Köln - Germany
Telephone: +49 221 9498 320
Fax: +49 221 9498 325
Email: deutschland@clinisciences.com
Web: https://www.clinisciences.com

Iceland

Company: CliniSciences ApS
Address: Oesterbrogade 226, st. 1, Copenhagen, 2100 - Denmark
Telephone: +45 89 888 349
Fax: +45 89 884 064
Email: island@clinisciences.com
Web: https://www.clinisciences.com

Ireland

Company: CliniSciences Limited
Address: 60 Merrion Square South Dublin 2, D02 HE24 - Ireland
Telephone: +353 1 6971 146
Fax: +353 1 6971 147
Email: ireland@clinisciences.com
Web: https://www.clinisciences.com

Italy

Company: CliniSciences S.r.l
Address: Via Maremmana inferiore 378 Roma 00012 Guidonia Montecelio - Italy
Telephone: +39 06 94 80 56 71
Fax: +39 06 94 80 00 21
Email: italia@clinisciences.com
Web: https://www.clinisciences.com

Netherlands

Company: CliniSciences B.V.
Address: Kraijenhoffstraat 137A, 1018RG Amsterdam, - Netherlands
Telephone: +31 85 2082 351
Fax: +31 85 2082 353
Email: nederland@clinisciences.com
Web: https://www.clinisciences.com

Norway

Company: CliniSciences AS
Address: c/o MerVerdi Munkerudtunet 10 1164 Oslo - Norway
Telephone: +47 21 988 882
Email: norge@clinisciences.com
Web: https://www.clinisciences.com

Poland

Company: CliniSciences sp.Z.o.o.
Address: ul. Rotmistrza Witolda Pileckiego 67 lok. 200 - 02-781 Warszawa -Poland
Telephone: +48 22 307 0535
Fax: +48 22 307 0532
Email: polska@clinisciences.com
Web: https://www.clinisciences.com

Portugal

Company: Quimigen Unipessoal LDA
Address: Rua Almada Negreiros, Lote 5, Loja 14, 2615-275 Alverca Do Ribatejo - Portugal
Telephone: +351 30 8808 050
Fax: +351 30 8808 052
Email: info@quimigen.com
Web: https://www.quimigen.pt

Spain

Company: CliniSciences Lab Solutions
Address: C/ Hermanos del Moral 13 (Bajo E), 28019, Madrid - Spain
Telephone: +34 916 750 700
Fax: +34 91 269 40 74
Email: espana@clinisciences.com
Web: https://www.clinisciences.com

Sweden

Company: CliniSciences ApS
Address: Oesterbrogade 226, st. 1, Copenhagen, 2100 - Denmark
Telephone: +45 89 888 349
Fax: +45 89 884 064
Email: sverige@clinisciences.com
Web: https://www.clinisciences.com

Switzerland

Company: CliniSciences AG
Address: Fracht Ost Flughafen Kloten CH-8058 Zürich - Switzerland
Telephone: +41 (044) 805 76 81
Fax: +41 (044) 805 76 75
Email: switzerland@clinisciences.com
Web: https://www.clinisciences.com

UK

Company: CliniSciences Limited
Address: 11 Progress Business center, Whittle Parkway, SL1 6DQ Slough- United Kingdom
Telephone: +44 (0)1753 866 511
or +44 (0) 330 684 0982
Fax: +44 (0)1753 208 899
Email: uk@clinisciences.com
Web: https://www.clinisciences.com

USA

Company: CliniSciences LLC
Address: c/o Carr Riggs Ingram, 500 Grand Boulevard, Suite 210 Miramar Beach, FL 32550- USA
Telephone: +1 850 650 7790
Fax: +1 850 650 4383
Email: usa@clinisciences.com
Web: https://www.clinisciences.com

cliniSciences

Version 07-10-2026

cliniSciences



Supporting Science at Every Stage

Providing high-quality reagents, instruments, and laboratory consumables to accelerate research, diagnostics, and biotechnology advancements.

MORE THAN A SUPPLIER — YOUR RESEARCH PARTNER.

OUR DISTINCTIVE STRENGTHS

SCIENTIFIC EXPERTISE

Expert guidance from PhD teams who understand your research and experimental challenges.

INNOVATION ACCESS

Discover emerging technologies and breakthrough solutions from around the world.

INDEPENDENT CHOICE

Unbiased recommendations focused on the best solution for your application.

LOCAL PRESENCE

Support backed by a strong pan-European organization and infrastructure.

RESEARCH SUCCESS

Helping accelerate discoveries through partnership, expertise, and responsive support.

BEYOND DISTRIBUTION

From congress sponsorship to scientific events and talent recruitment, we help strengthen your research ecosystem.

SCIENTIFIC EXPERTISE.
HUMAN SUPPORT.
CLOSER TO YOU.

www.clinisciences.com