

Fast and quantitative measurement of fertility assays – single or parallel.  
Estradiol, FSH, HCG preg, LH, Progesterone, Prolactin, Testosterone

# PATHFAST®

## FERTILITY MARKER



- » 6 samples in parallel
- » in 26 minutes
- » from whole blood
- » in central lab quality

The PATHFAST analysis system combines the accuracy of a full-scale lab with the flexibility of a mobile solution. Best prerequisites for fast differential diagnosis at the point of care. Easy to operate, install and network. Parallel processing enables the examination of six samples in only 26 minutes.

### Parallel processing for fast action

Six parallel channels. Six quantitative analysis simultaneously. Six results in 26 minutes. This gives PATHFAST its unique speed. Whether you want to examine all markers or a single one for one or more patients samples: It is always save and perfectly efficient.

The use of whole blood saves time in receiving the results while the patient is still at the point of care.

### Concept and Application

Its compact design and low weight make PATHFAST the ideal analysis system in labs, hospitals, fertility clinics and medical offices. Applied wherever fast quantitative results with full-scale lab quality provide decisive diagnostic advantages. Directly at the point of care. With its space-saving design and large degree of flexibility, PATHFAST is also an ideal supplement or back-up system in central labs. It can be applied at any time (24 h per day) without interfering the processes of routine analysis.

### Equipment and Networking

The PATHFAST analysis system offers a complete range of equipment. Computer and printer are integrated, operation performs via touchscreen monitor. The barcode of the samples is read with a scanner. With its interface (RS-232C), it can be easily connected to the LIMS (Laboratory Information Management System). Networking enables direct data transfer to the central lab and access to the results from any PC.



### Principle and Precision

PATHFAST is a fully automatic immunoassay analyzer, which combines the progressive chemiluminescence technology with the patented Magtration® technology. Small sample volumes can be detected with high accuracy and precision. The device and the reagent strips provide optimum sensitivity. Whole blood, plasma and serum are automatically identified and processed. The results are perfectly reproducible and correlate outstandingly with lab analyses.

### Operation and Safety

Insert the reagent cartridge, apply the samples and press the „Start“ button. PATHFAST takes care of everything else fully automatic. A simple 3-step method provides results in lab quality. No additional reagents, buffer solution or sample pipettes (e.g. capillaries) required. A water connection or drain is not necessary. The lab personnel does not require any special skills or certifications. Additional advantages are the highest level of operational safety and minimum maintenance efforts.

# Estradiol, FSH, HCG preg, LH, Progesterone, Prolactin, Testosterone

Diagnostic efficiency by parallel or single scanning of all significant markers.

PATHFAST determines the quantitative concentration of Estradiol (E2), FSH, HCG preg, LH, Progesterone, Prolactin, and Testosterone from one single whole blood sample, or serum or plasma. The quantitative data of the parallel analyses provide results within minutes, which facilitate the therapeutical decision. This is basic for a safe and fast on-site diagnosis for patients undergoing fertility hormone treatment.

## Available Fertility-Markers

### Estradiol (E2)

PATHFAST® Estradiol is an in vitro diagnostic assay for the quantitative measurement of estradiol (E2) in whole blood, plasma, and serum.

Assay range	20 – 2000 pg/mL
Total % CV in serum	QC-M = 9.9%, QC-H = 8.5%
Correlation vs. Immulite 2000	$y = 1.06x + 13.3$ , $r = 0.970$ , $n = 82$

### Follicle Stimulating Hormone (FSH)

PATHFAST® FSH is an in vitro diagnostic assay for the quantitative measurement of follicle stimulating hormone (FSH) in whole blood, plasma, and serum.

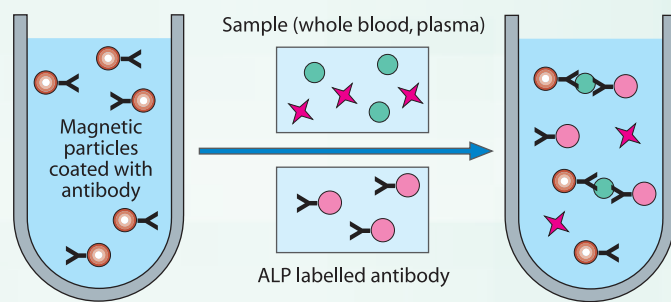
Assay range	0.1 – 200 mIU/mL
Total % CV in serum	QC-L = 3.6%, QC-M = 3.7%, QC-H = 5.1%
Correlation vs. Elecsys	$y = 1.001x + 0.021$ ; $r = 0.984$ , $n = 104$

### HCG preg

PATHFAST® HCG preg is an in vitro diagnostic assay for the quantitative measurement of human chorionic gonadotropin (HCG) in whole blood, plasma, and serum.

Assay range	1 – 5000 mIU/mL
Total % CV in serum	QC-L = 3.0%, QC-M = 3.7%, QC-H = 4.7%
Correlation vs. VIDAS	$y = 1.015x + 9.18$ , $r = 0.979$ , $n = 102$

## PATHFAST® Test Principle (sandwich assay)



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### Luteinizing Hormone (LH)

PATHFAST® LH is an in vitro diagnostic assay for the quantitative measurement of luteinizing hormone (LH) in whole blood, plasma, and serum.

Assay range	0.1 – 200 mIU/mL
Total % CV in serum	QC-L = 4.3%, QC-M = 4.1%, QC-H = 5.6%
Correlation vs. Immulite 2000	$y = 1.016x + 0.008$ , $r = 0.986$ , $n = 104$

### Progesterone

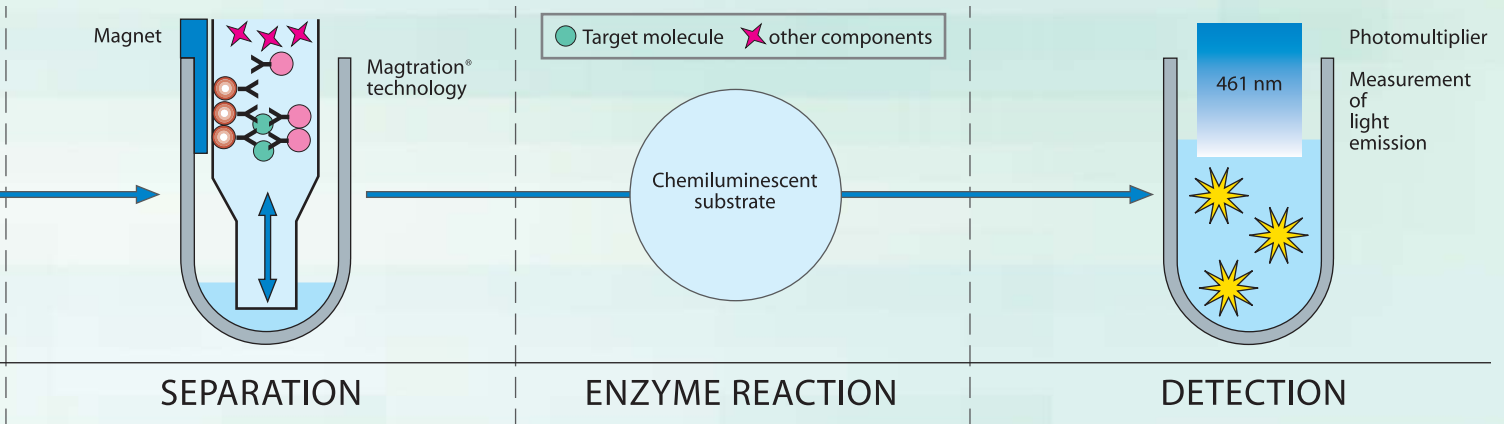
PATHFAST® Progesterone is an in vitro diagnostic assay for the quantitative measurement of progesterone in whole blood, plasma, and serum.

Assay range	0.2 – 40 ng/mL
Total % CV in serum	QC-L = 8.6%, QC-M = 6.1%, QC-H = 7.2%
Correlation vs. Elecsys	$y = 0.981x + 0.321$ , $r = 0.989$ , $n = 73$

### Prolactin (PRL)

PATHFAST® Prolactin is an in vitro diagnostic assay for the quantitative measurement of prolactin (PRL) in whole blood, plasma, and serum.

Assay range	0.5 – 200 ng/mL
Total % CV in serum	QC-L = 3.0%, QC-M = 4.2%, QC-H = 4.5%
Correlation vs. Elecsys	$y = 1.017x - 0.549$ , $r = 0.992$ , $n = 108$



## Testosterone (coming soon)

PATHFAST® Testosterone is an in vitro diagnostic assay for the quantitative measurement of testosterone in whole blood, plasma, and serum.

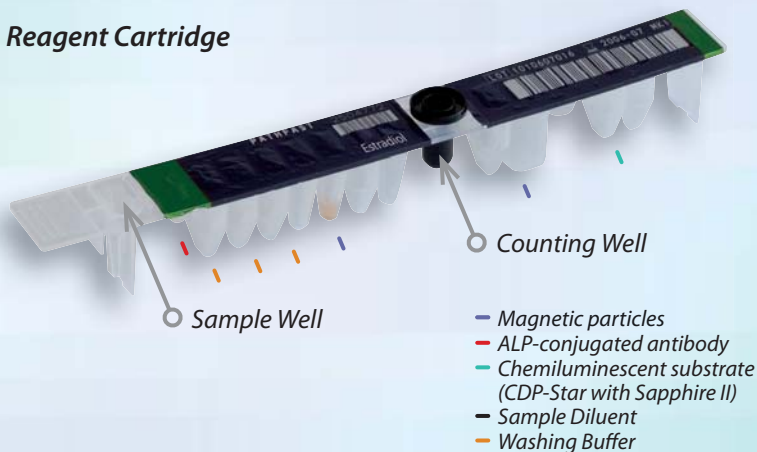
## Future Markers

With the PATHFAST analysis system, you are going for a trend-setting system concept. A constantly expanded reagents menu guarantees solutions for future demands.

### Specifications

- Instrument type:** Desktop
- Throughput:** Up to 6 samples or parameters per run
- Measuring time:** Less than 26 min.
- Sampling material:** Whole blood, plasma, serum
- Measuring principle:** Analysis takes place with the help of the chemiluminescence enzyme immunoassay technology (CLEIA) and Magstration® technology.
- Reaction temperature:** 37,5 °C
- Work volume:** 20 – 700 µl
- Wavelength:** 300 – 650 nm
- Data storage:** Patient data: 1000  
QC data: 1800  
CAL data: 300
- Datatransfer:** ASTM standard
- Dimensions:** 375 (w) x 570 (d) x 510 (h) mm
- Weight:** 33 kg
- El. requirements:** 100 - 240 V AC (50/60 Hz)
- Power consumption:** 360 VA
- Monitor/keyboard:** LCD touchscreen
- Printer:** integrated
- PC:** integrated
- Interface:** RS-232C
- Calibration:** By the factory, 2-point calibration every 4 weeks
- 24-h operation (stand-by):** recommended

## Reagent Cartridge



**PATHFAST®** The highly precise, fast and compact  
chemiluminescence immunoassay analysis system.



Product List	Item number	Pack size
<b>PATHFAST® Fertility Marker</b>		
SYSTEM		
PATHFAST® System Analyzer for the detection of fertility, cardiac and other emergency parameters	1114-0000	1 X 1
CONSUMABLES AND ACCESSORIES		
PATHFAST® pipette tips	1114-1000	5 X 42 units
PATHFAST® waste box	1114-1001	10 units
REAGENT KITS		
PATHFAST® Estradiol	1110-3002	60 tests
PATHFAST® FSH	1110-3004	60 tests
PATHFAST® HCG preg	1110-3000	60 tests
PATHFAST® LH	1110-3001	60 tests
PATHFAST® Progesterone	1110-3003	60 tests
PATHFAST® Prolactin	1110-3005	60 tests
PATHFAST® Testosterone	1110-3006	60 tests
PATHFAST® reagents kits for critical care and cardiac diagnostics (HCG, hsCRP, NT-proBNP, Trop I sensitive, D-Dimer, Myoglobin, CK-MB mass) are also available.		

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