

LumiQuest®

# CHEMILUMINESCENCE



Labtest 

Life deserves the best diagnosis.



## LumiQuest@ Line

# CHEMILUMINESCENCE WITHIN REACH FOR YOUR LAB

Labtest, the largest in vitro diagnosis industry in Brazil brings another innovation to the market. It is the **Lumiquest®**, a semiautomatic solution for **determination of hormones and tumor markers by chemiluminescence.**

Lumiquest® is the result of investments in research and development and it was conceived at CDICT – Center of Development, Innovation, Science and Technology, Labtest's P&D department. Now your lab can perform **high value added tests with practicality, technology and reliability.**

The products developed are robust, user-friendly and require only few resources to be used, being easily incorporated at the laboratory routines.

## How does the test work?

**Lumiquest®** is a semiautomatic solution. Products were developed using the principles of solid-phase immunoassays in which detection and quantification of hormones or tumor markers present in samples occurs through reactions between specific antibodies and ultrasensitive conjugates.

## A REVOLUTION IN YOUR LAB

- Easy testing;
- Fast delivery of accurate and reliable reports;
- Assays with high sensitivity and wide operational intervals;
- Ready for use reagents;
- Stable calibration curves;
- Instrument is easily handling, simple installation and requires low maintenance;
- There is no need for special facilities for testing. Assays are performed on the laboratory bench;
- Washing Solution and Reveal Solutions common to all products.

### Certifications:

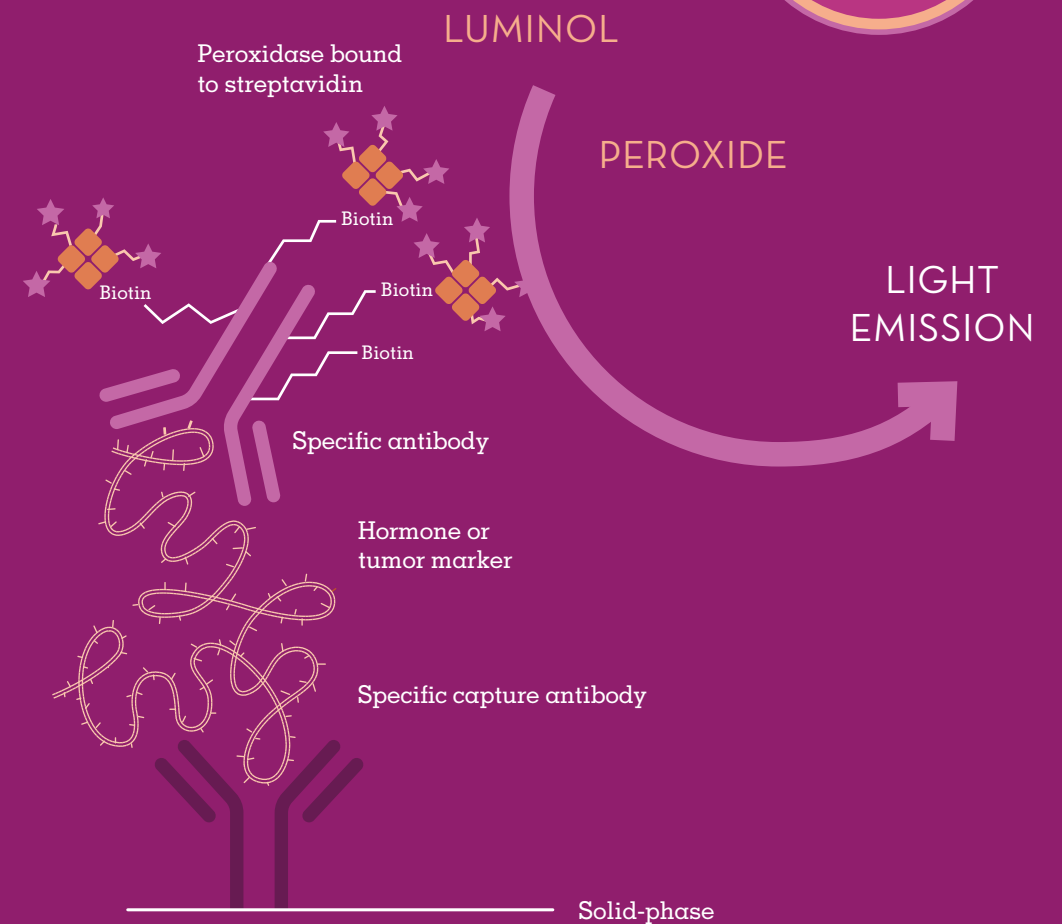


**Lumiquest® products participate in the International Program of Excellence in Laboratory Medicine created by CAP – College of American Pathologists.**

## LUMIQUEST® LINE

In addition to stable reagents ready for use, the line has a multi-control in two levels and ancillary reagents common to all products. Find out more:

**RESULTS  
OF THYROID HORMONES  
IN ONLY  
60 MINUTES.**



Schematic diagram of the principle of TSH Ref. 903

## Tests execution time

For all products, the total execution time for tests is only 60 minutes.

## Instruments required to perform the tests

The tests are easily performed with instruments used daily in clinical labs, such as automated pipettes and incubators with regulation of temperature.

## Tests reading

The last stage of tests is the chemiluminescent reaction. This reaction is triggered by the injection of Reveal Solutions (Luminol and Peroxide) by the **Lumiquest®** instrument. 12 seconds after these solutions are added, the chemiluminescent reaction is detected by the instrument's sensor. The light emitted is converted in values that represent the concentration of analytes present in the samples tested.

## Tests calibration

The calibration of the assays is obtained by a six point Master Curve calibration type.

The Master curve data (calibrators' concentration and respective RLU) is informed to the customers and must be manually inserted in the instrument software protocol. Master Curve varies according to product lot and when using a kit for the first time, the Master Curve must be adjustable in two points: Low and High calibrators, provided within the kit.

The same procedure should be used when using the internal quality control recommends..

## Portfolio

Lumiquest® is constantly improving and launching new products. In this initial launching stage there are ten products available.

## Products

### LUMIQUEST®

#### **TSH** Ref. 903

Ultrasensitive system to determine TSH in serum samples.  
Operational interval: <0.05 to approximately 20  $\mu$ UI/mL

#### **T4 Livre** Ref. 906

System to determine Free T4 in serum samples.  
Operational interval: 0.3 to approximately 5.0 ng/dL

#### **T4 Total** Ref. 905

System to determine Total T4 in serum samples.  
Operational interval: 1.0 to approximately 20  $\mu$ g/dL

#### **PSA Total** Ref. 901

System to determine Total PSA in serum samples.  
Operational interval: 0.5 to approximately 40 ng/mL

#### **PSA Livre** Ref. 902

System to determine free fraction of PSA (Free PSA) in serum samples.  
Operational interval: 0.5 to approximately 20 ng/mL

#### **hCG** Ref. 903

System to determine hCG in serum samples.  
Operational interval: 1.0 to approximately 500 mUI/mL

#### **Qualitrol Q** Ref. 907

Internal quality control in determining TSH, Free T4, Total T4, Total PSA, Free PSA and hCG. It has two levels. Compatible with the products:

TSH **Ref. 903**

T4 Livre **Ref. 906**

T4 Total **Ref. 905**

PSA Total **Ref. 901**

PSA Livre **Ref. 902**

hCG **Ref. 904**

#### **Concentrated Wash Up Solution** Ref. 908

Wash up solution compatible with the products:

TSH **Ref. 903**

T4 Livre **Ref. 906**

T4 Total **Ref. 905**

PSA Total **Ref. 901**

PSA Livre **Ref. 902**

hCG **Ref. 904**

#### **Reveal Solution** Ref. 909

Reveal system for chemiluminescent assays. Compatible with the products:

TSH **Ref. 903**

T4 Livre **Ref. 906**

T4 Total **Ref. 905**

PSA Total **Ref. 901**

PSA Livre **Ref. 902**

hCG **Ref. 904**

#### **Sanitizing Solution** Ref. 604

Cleaning solution for maintenance of the Lumiquest equipment.

## Equipment

# LUMIQUEST®



Semiautomatic luminometer for easy operation and low maintenance tubes:

- Capacity to accommodate two tubes, accelerating the results;
- System for injection of two reagents;
- User-friendly software compatible with Windows;
- Robustness and stability of the chemiluminescent reaction detection system;
- Precision and accuracy in the results provided;
- Capacity to store and track data from tests results;
- Low maintenance frequency;
- Dimensions: 240 x 280 x 220 mm (L x W x H);
- Weight: 4 kg.

**LumiQuest**  
QUIMIOLUMINESCÊNCIA LABTEST

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