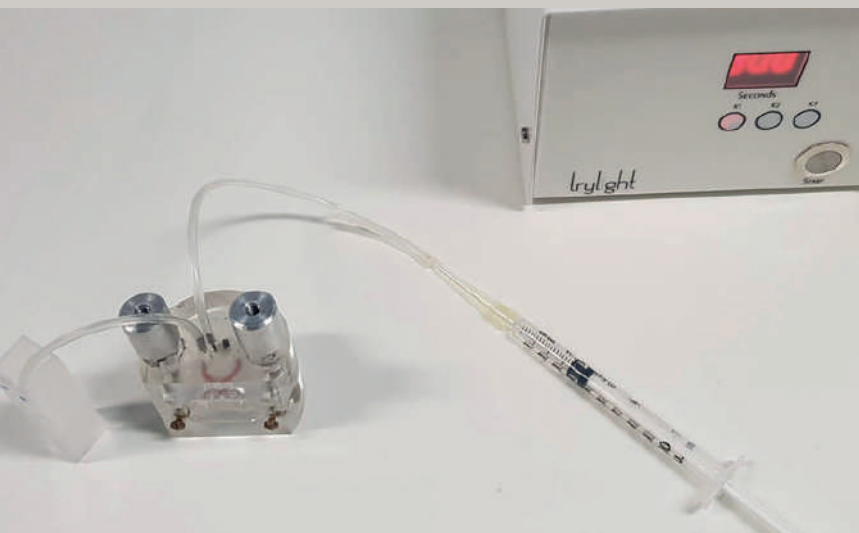


trylight

Trylight for your biosensing!



The Photochemical Immobilization Technique (PIT) is a functionalization method able to tether antibodies (Abs) on metal surfaces (such as gold or other bio-compatible metals) in a proper orientation that is with their binding sites well exposed to the environment.

This strategy is based on the selective photochemical reduction of disulfide bridges in immunoglobulins (Ig) produced by UV activation of near aromatic amino acid. Briefly, PIT is based on the selective photoreduction of disulphide bridges produced by the UV activation of the trp/cys-cys by means of a Trylight lamp.



MAIN BIOSENSING APPLICATION

- Magnetoelastic sensor
for reproducibility
- Quartz Crystal Microbalance (QCM)
for high specificity
- Surface Plasmon Resonance (SPR)
for kinetics studies
- Plasmonic Enhanced Fluorescence (PEF)
for high sensitivity

The UV photon energy is adsorbed by tryptophan and transferred to near electrophilic species like the close cys-cys resulting in the cleavage of the disulphide bridge and in the formation of new reduced thiol (SH) groups able to bind. Considering that the triad of residues trp/cys-cys can be found in every Ig, the PIT is applicable in a wide range of fields.

How Trylight works

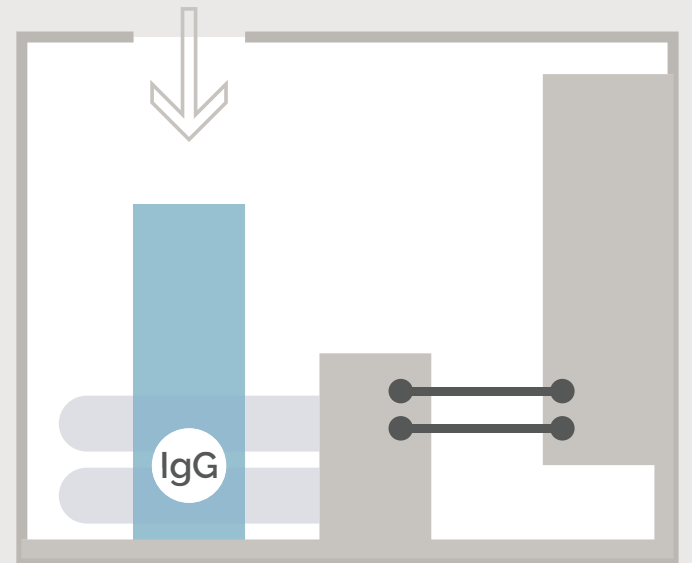
1

A solution of IgG antibodies is pipetted in a quartz cuvette



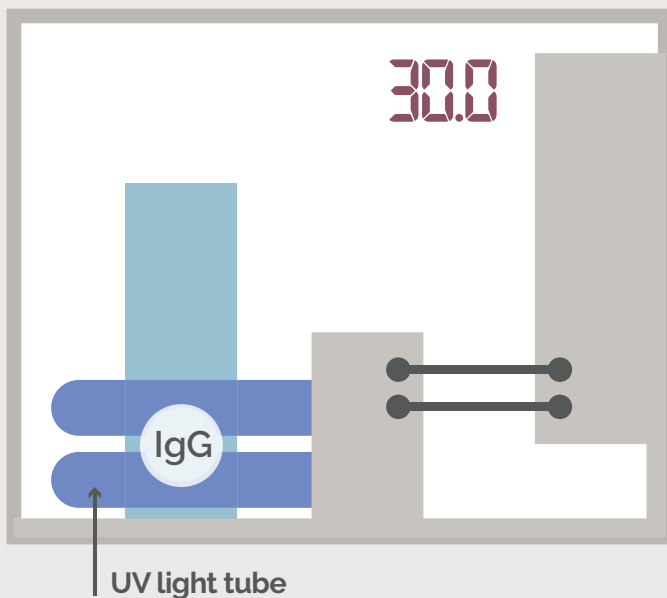
2

The quartz cuvette is placed inside the device



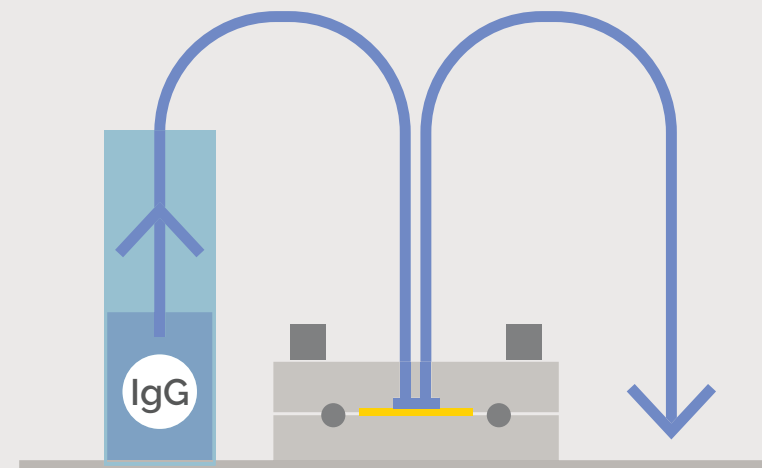
3

The UV irradiation of 30 s is started



4

The irradiated solution can be conveyed onto any gold transducer by fluidics and/or dropping





Technical sheet

LAMP TYPE

PR7GL-5 253.7 nm

LAMP BODY

Pure quartz of European origin

PIPE DIAMETER

10 mm

FORM

U

LENGTH

total pin body excluding
45 mm

WIDTH

40 mm

SUPPLY VOLTAGE

12 Vdc

LAMP CURRENT

170 mA

POWER OF SINGLE LAMP

6 W

WORKING FREQUENCY

35 KHz

UV EMISSION WAVELENGTH TYPE

PR7GL-5 254 nm

TOTAL UV INTENSITY ON THE CUVETTE

0.3 W / cm²

OPERATING TEMPERATURE

-10 to 70 °C

HUMIDITY

max 95%

CONNECTION FEET

tungsten diam. 0.5 m

trylight

How to order

You can order your Trylight
directly online at
www.trylight.eu
or by e-mail at
info@trylight.eu

Cost

The cost of Trylight
is 1400 Euro, vat excluded

Payment

You can pay online via paypal with most
of credit cards or you can pay by bank
transfer. Ask further details at
info@trylight.eu

Shipping

We can ship Trylight worldwide.
Ask for a specific quotation at
info@trylight.eu

www.trylight.eu
info@trylight.eu

Trylight is patented.
Utility Model Patent
nr. 202018000003368

Trylight is a product of

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