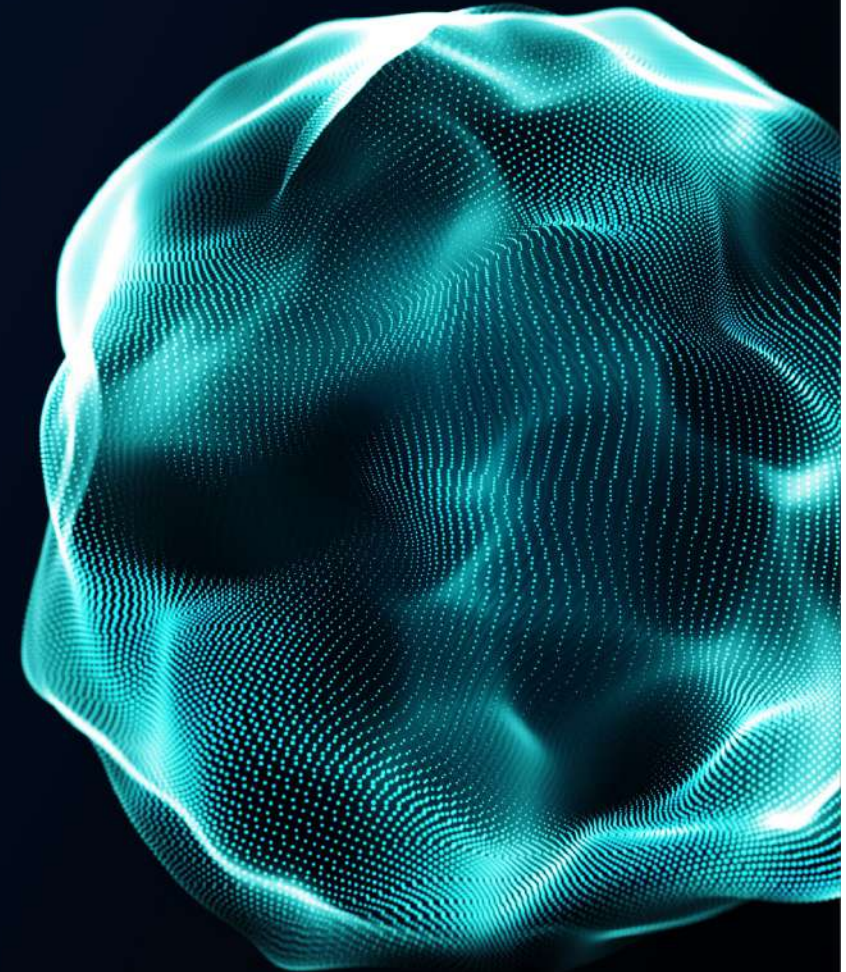
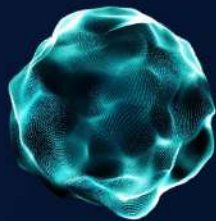
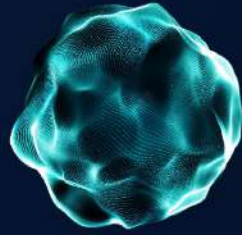


Poly-Dtech Presentation

2023





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Address 204 Avenue de Colmar
67100 Strasbourg

Web www.poly-dtech.com

Email contact@poly-dtech.com

Enhance your detection



Strasbourg

- Cronenbourg campus
- Experts in Chemistry and in Biology
- 120 m² dedicated to R&D and production

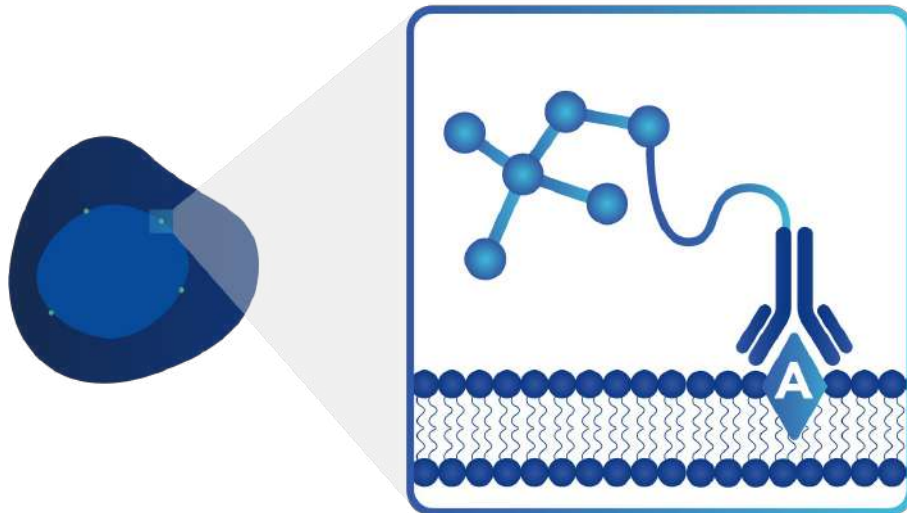


@polydtech

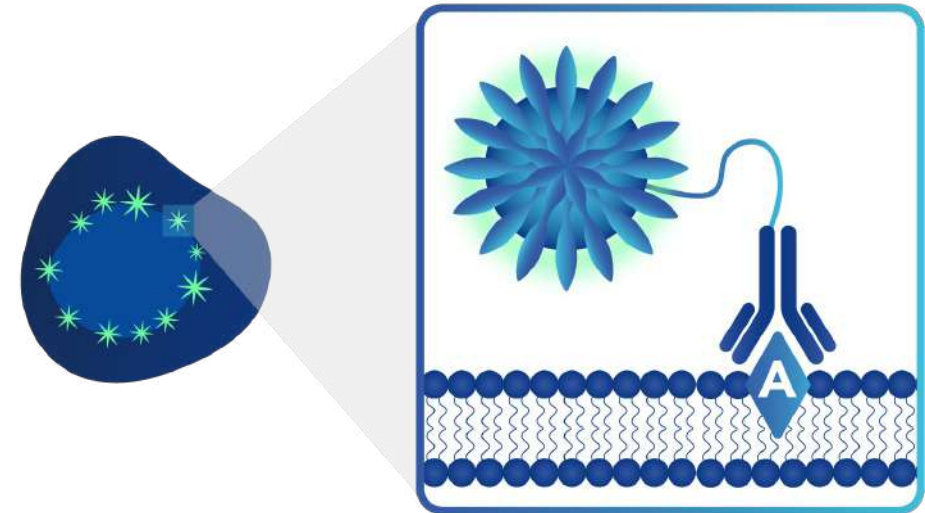
Our expertise – Our solution

Develop and produce high-performance fluorescent nanoparticles with unique characteristics to improve the detection of biomarkers

CURRENT FLUORESCENT PROBE

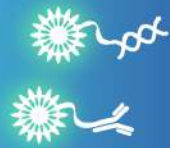


OUR BRIGHT-DTECH™ TECHNOLOGY



Bright-Dtech™ technology

Simplified and controlled coupling
Easy addition of proteins and DNA around nanoparticles



Multi-detection
Several colors of nanoparticles available



Biocompatibility
No cell toxicity



High photostability
No signal loss



High brightness
Improvement of the detection




Specific spectral signature and long emission lifetime
Optimal detection of the signal compared to background noise



Our advantages

Poly-Dtech vs. Competitors

	 POLY-DTECH				
Type	Bright-Dtech	Fluorescent molecules	Quantum dots	Lanthanide complexes	Polymer nanoparticles
Brightness	Strong	Medium	Medium	Weak	Strong
Lifetime	Long	Short	Short	Long	Short
Photostability	Strong	Weak	Strong	Strong	Medium

TRF / HTRF™ Technology

Enhance your detection

Bright-Dtech™

Available in several colors



Our products & Our services



RESEARCH PRODUCTS



Ready-to-use conjugated nanoparticles
Conjugation kits

DIAGNOSTIC PRODUCTS



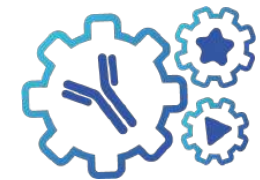
TR-FRET kits
TR-FLISA kits
COVID tests

NANOPARTICLE SERVICE



Custom coupling development
Custom nanoparticle development

DIAGNOSTIC SERVICE



Custom assay development:

- TR-FRET
- TR-FLISA
- TR-Lateral Flow

Bright-Dtech™ kits

Ready-To-Use conjugated nanoparticles



Choose your color

- **Terbium (Green)***
- **Europium (Red)***
- **Samarium (Orange)**
- **Dysprosium (Yellow)**
- **Neodymium (Infrared)**
- **Ytterbium (Infrared)**

* Best choice

Choose your coupling

- **Anti-Human IgG**
- **Anti-Rabbit IgG**
- **Anti-Goat IgG**
- **Anti-Mouse IgG**
- **Streptavidin**
- **Biotin**
- **Without coupling**



Enhance your detection

Link-Dtech™ kits

Make your own couplings yourself: with the protein of your choice

Best choice

Link-Dtech 545 – Tb (Green)

Link-Dtech 575 – Dy (Yellow)

Best choice

Link-Dtech 614 – Eu (Red)

Link-Dtech 980 – Yb (Infrared)



Link-Dtech 600 – Sm (Orange)

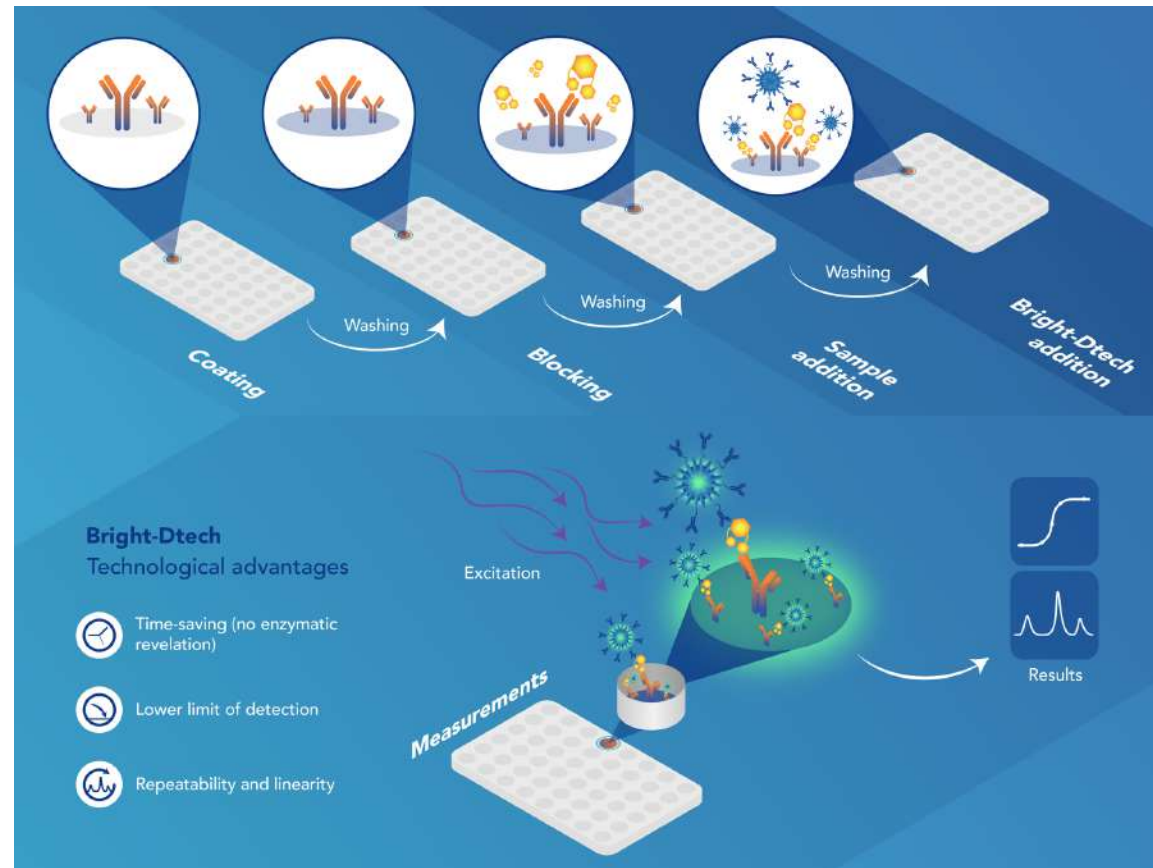
Link-Dtech 880 – Nd (Infrared)



Enhance your detection

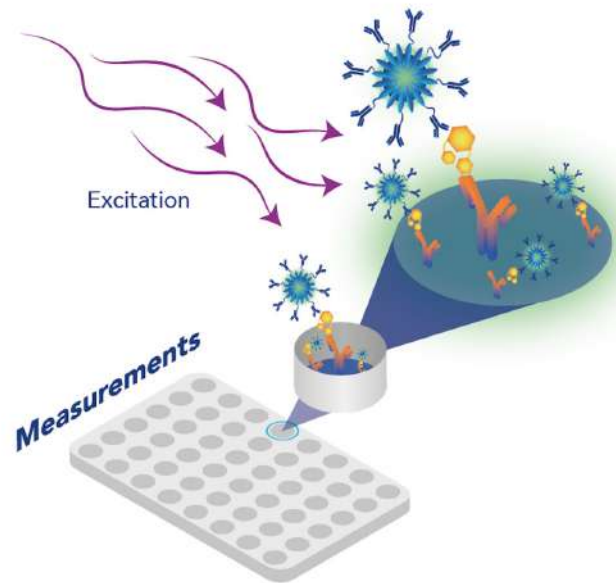
TR-FLISA kits

Replace enzymatic reaction by our fluorescent nanoparticles



TR-FLISA kits

Discover our kits



Advantages

- **Reduced working time (from 4h to 2h)**
- **Low background noise**
- **Long signal stability**
- **Improved LOD**

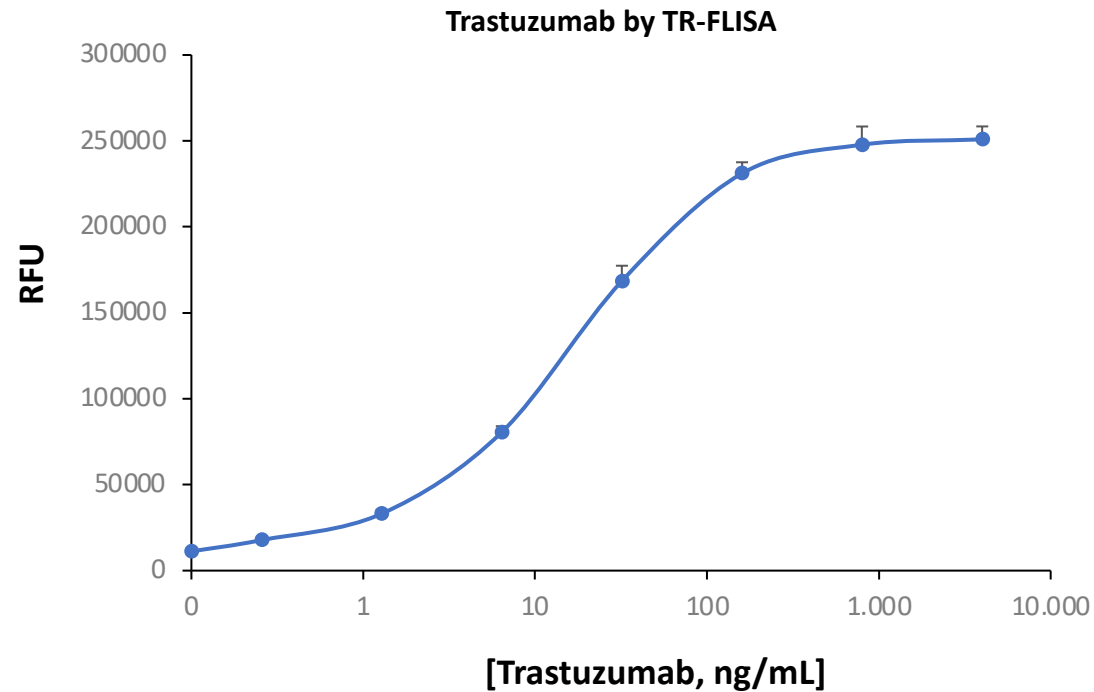
Choose your biomarker

- **Covid 19 (IgG α -N protein)**
- **Trastuzumab (α -HER2)**

We are currently developing new tests in our R&D center, visit our website to discover them

TR-FLISA kits

Example: Quantification of Trastuzumab (Indirect)



LOD = 59 pg/mL

LOD of competitors:

Competitor A:
11000 pg/mL

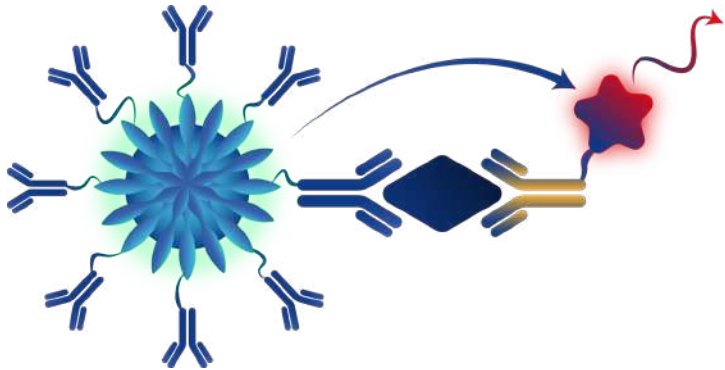
Competitor B:
5000 pg/mL

Competitor C:
1500 pg/mL

**Improved LOD
until 160x**

TR-FRET kits

Discover our kits



Advantages

- **Fast (less 2h)**
- **Wash-free**
- **No background noise**
- **Improved LOD**
- **Improved dynamic range**
- **Economic**

Choose your biomarker

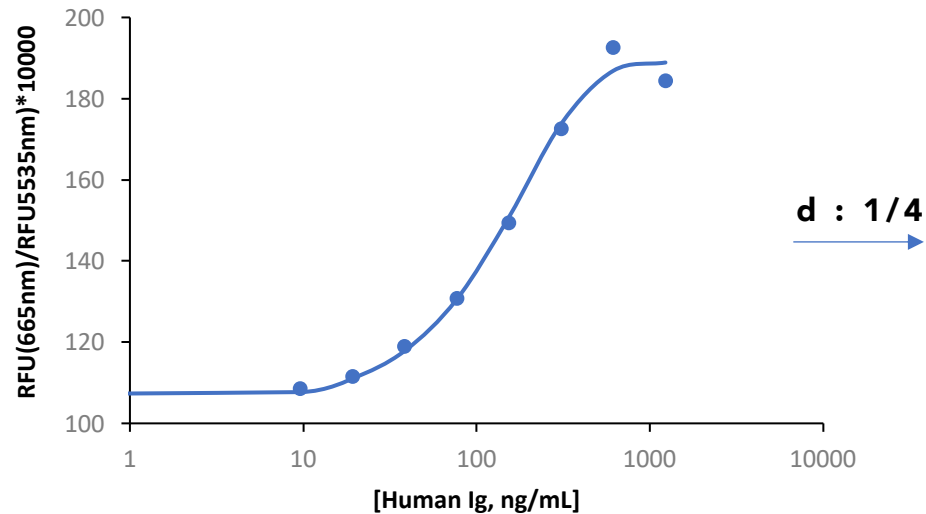
- **Human IgG**
- **PSA**

We are currently developing new tests in our R&D center, visit our website to discover them

TR-FRET kits

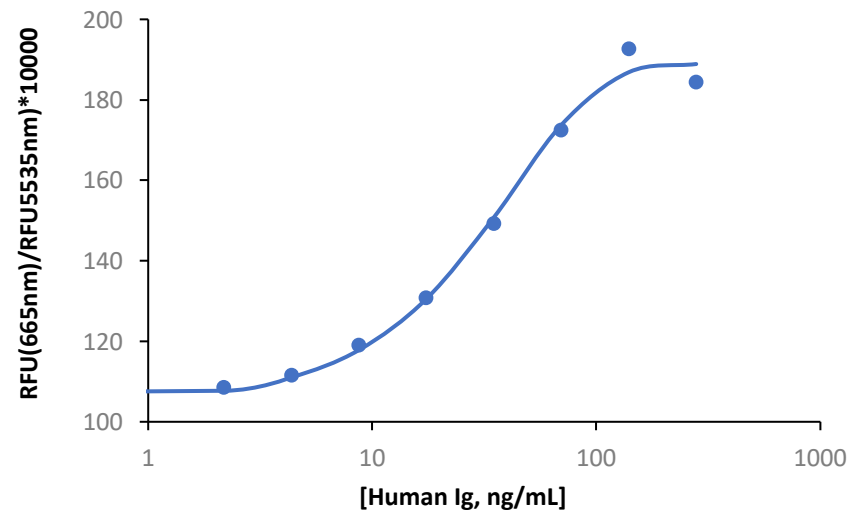
Example: Quantification of Human IgG (sandwich)

Human IgG by TR-FRET
(sample concentration)
Dynamic range: 0.05 to 1 200 ng



LOD = 40 pg/mL

Human IgG by TR-FRET
(concentration in wells)
Dynamic range: 0.05 to 1 200 ng



LOD = 9 pg/mL

Improved until
2 log

LOD of competitors:

Competitor A:
900 pg/mL

Competitor B:
375 pg/mL

Competitor C:
332 pg/mL

Improved LOD
until 100x

Our products & Our services



RESEARCH PRODUCTS



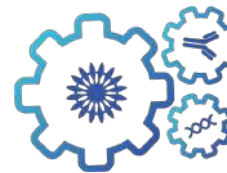
Ready-to-use conjugated nanoparticles
Conjugation kits

DIAGNOSTIC PRODUCTS



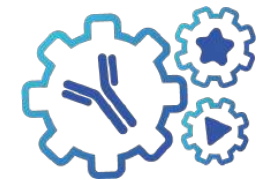
TR-FRET kits
TR-FLISA kits
COVID tests

NANOPARTICLE SERVICE



Custom coupling development
Custom nanoparticle development

DIAGNOSTIC SERVICE



Custom assay development:

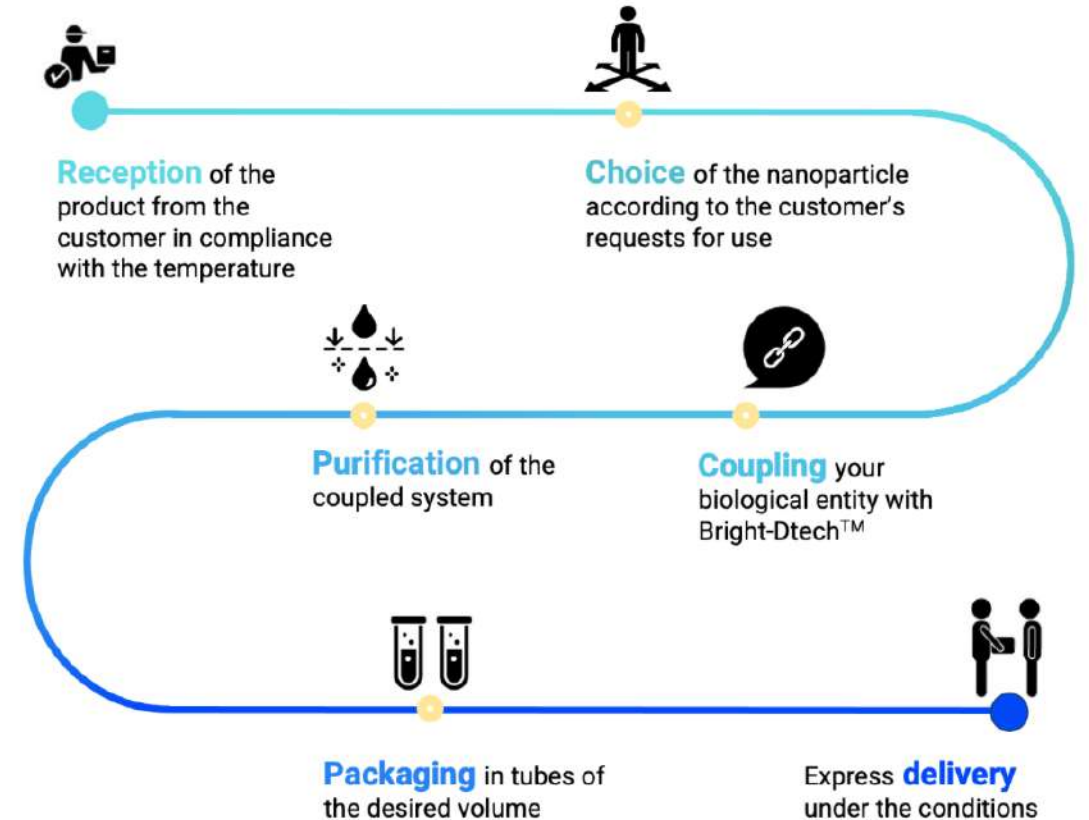
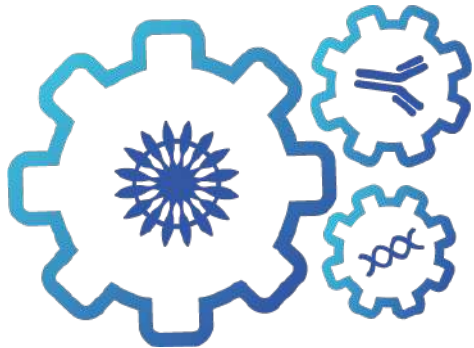
- TR-FRET
- TR-FLISA
- TR-Lateral Flow

Custom Coupling Service

Entrust us your biological entity, we will couple it with our nanoparticles

Advantages

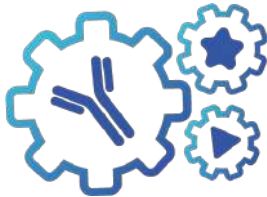
- **Fast**
- **High efficiency**
- **Controlled coupling**
- **Analysis**
- **Made by experts**
- **Economic**



Custom Assay Development

We develop tailor-made assay with Bright-Dtech™

SERVICE immunoassays



Custom assay development:

- TR-FRET
- TR-FLISA
- TR-Lateral Flow

1

Research & Development

- Production of nanoparticles
- Coupling
- Quality control
- Matrix
- Titration - Curve

2

Optimization

- Couplings / concentrations
- Anticorps / nanoparticles
- Parameters / working conditions

3

Validation

- Specificity
- Linearity
- Sensibility
- Precision

Advantages

- No background noise
- Fast detection
- Improved performances
- Made by experts
- Economic
- Save time

QR Code Catalogue

Here you can find the QR code and the link for the catalogue with our products and services.



<https://qrco.de/bdo5gx>

Thank you for your attention

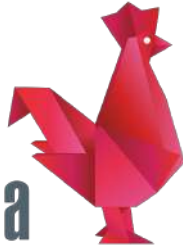
bpifrance

Grand Est
ALSACE CHAMPAGNE-ARDENNE LORRAINE

france
BIOVALLEY
l'innovation santé

 **Réseau
Entreprendre**
ALSACE


POLY-DTECH



La
**FRENCH
TECH**




UNIVERSITÉ DE STRASBOURG



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