

To me, research is our surrounding world methodic observation to better know and understand it. It is collecting and compiling our knowledge, draw conclusions and then create innovative applications and new tools, to the well-being of mankind.

Dr Marc MENU, CEO of IBJB

### Institut de BIOTECHNOLOGIES

Jacques Boy

Diagnostic of mother-fetus incompatibility:

#### **HOW TO FOCUS THE PROPHYLAXIS ONLY TO RISK PREGNANCIES?**



#### **ABOUT THE** INSTITUT DE BIOTECHNOLOGIES JACQUES BOY

Founded in 1985 and based in Reims, France, we develop, manufacture and sell in-vitro diagnostic reagents and equipment. In constant watch for the market's needs and science progress, our research team collaborates with multidisciplinary external teams to imagine what tomorrow's medical solutions will be.

Bolstered by our know-how in immunohematology, we specifically invest in molecular biology for pregnancy care since 2004. We design products for certified laboratories, intended to better target the treatments, like our "Free DNA Fetal Kit® RhD".

Human size company, flexible and reactive, supported by international scientific partners, our teams are proud to have brought the market new product that precisely fitted the users and the patients.

Our duty is to remain at the service of people and healthcare

Pôle technologique Henri Farman 4 allée Albert Caquot - BP 227 51686 Reims Cedex 2 - France Fax. +33 (0)3 26 79 72 73







**CONTACT US** Tél.: +33 326 797 272

Email: contact@biotechjboy.com

www.biotechjboy.com

Fetal rhesus genotyping:

**NIPD AT ITS BEST** 



## IN GERMANY, 130,000 RHD- PREGNANCIES EACH YEAR

60% RhD+ fetus

mandatory prophylaxis for those 78,000 mothers-to-be

40% RhD- fetus

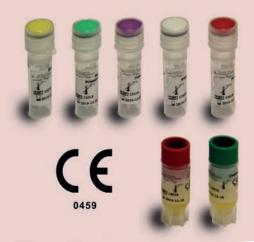
EACH YEAR, 52,000 MOTHERS-TO-BE RECEIVE AN USELESS PROPHYLAXIS

#### Fetal RHD genotyping on maternal blood

- A non-invasive test performed on mother's blood, sampled with EDTA tubes
- · Based on rtPCR
- · Reimbursed in France, UK, and Belgium
- Performed by certified laboratories

# Applied for all RhD- pregnancies, fetal *RHD* genotyping on maternal blood allows to<sup>1</sup>:

- prevent unnecessary administration of blood products (anti D immunoglobulin) and their associated risk
- increase availability of anti-D immunoglobulin for use following potential sensitising events (PSEs) in pregnancy where the NIPD result for fetal *RHD* genotype is positive
- $\cdot$  avoid unnecessary painful injections for women where the NIPD for fetal  $\emph{RHD}$  genotype is negative
- $\cdot$  reduce the number of antenatal anti-D prophylactic clinic appointments needed, and the amount of anti-D immunoglobulin used
- reduce the anxiety associated with potential sensitising events for D-negative women where the NIPT result for fetal *RHD* genotype is negative
- provide information to allow D-negative women to make an informed decision about whether to have treatment with anti-D immunoglobulin.

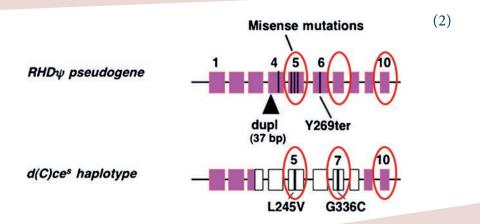


- Maize DNA (DNA extraction control)
- Maize DNA primers + probe
- RHD exon 5 primers + probe
- RHD exon 7 primers + probe
- RHD exon 10 primers + probe
- RHD positive (+) control
- RHD negative (-) control

# The Free DNA Fetal Kit<sup>®</sup> RhD from IBJB: the only CE-IVD marked kit for fetal *RHD* genotyping

#### **ADVANTAGES:**

- · From 11th gestational week
- Extraction and amplification validated on most common lab equipment
- · Amplification of *RHD* exons 5, 7, and 10 for silent genes (*RHD*  $\psi$ ) identification (see below)
- · Controls included
- · No fetal sex determination
- ·1 kit for 87 patients



<sup>1.</sup> High-throughput non-invasive prenatal testing for fetal  $\it RHD$  genotype - NICE Guidance

Rouillac-le-C, et al., Noninvasive fetal RHD genotyping from maternal plasma, Transfusion Clinique et Biologique (2008), doi: 10.1016/j.tracli.2008.01.003