

# eluthia

prenatal care



## NIPT Rhesus

Rhesus-Faktor D (RhD) Test

**Eluthia: Your specialised laboratory  
for non-invasive prenatal testing**

## Why should you determine your child's Rhesus factor before birth?

In addition to blood group A, B, AB or O, it is also possible to determine the Rhesus factor D (RhD) of the blood. It can be either positive or negative. This normally does not make any difference.

If you are one of the 15% of women in Germany who are RhD-negative and your child is RhD-positive (which is the case for about 40% of RhD-negative mothers), your child's health could be affected due to an immune reaction. However, this can easily be prevented by a preventive injection (anti-D prophylaxis).

If you are RhD-negative, the RhD test can be used to determine whether your child is RhD-positive and you will receive the prophylaxis. So far, all RhD-negative women have received this prophylaxis, including the 60% of RhD-negative women with an RhD-negative child for whom this preventive measure was not necessary.

RhD testing, which has only been possible for a few years, means that prophylaxis can now be limited to pregnant women for whom it is necessary and sensible to do so. The costs of the test are covered by the statutory health insurance funds.

## How does the test work?

Your blood also contains degradation products of your child's cells or the placenta, including small fragments of DNA – in other words, your child's genetic information. This is referred to as cell-free fetal DNA. By adding short pieces of DNA, a reaction known as PCR can be used to amplify a piece of the gene for rhesus factor D from the cell-free fetal DNA and make it visible with certain dyes. If this succeeds, you will know that your child is RhD-positive; if it does not, then he or she is RhD-negative.

Eluthia carries out the RhD test in cooperation with the Zotz Klimas laboratory (Düsseldorf).



## How safe is the test?

The accuracy of medical tests is indicated by two values that are determined in clinical studies:

The sensitivity indicates how many out of 100 RhD-positive children the test finds. This value is 99.93% for the RhD test.

Specificity indicates how many out of 100 RhD-negative children are correctly identified as RhD-negative. This value is 99.61%\* for the RhD test. In about 1% of the women tested, the RhD value cannot be determined.

Testing is possible from the 11th week of pregnancy. As the proportion of cell-free fetal DNA increases with the increasing duration of the pregnancy, it is recommended that testing should ideally be carried out between the 18th and 22nd weeks of pregnancy.

\*Legler, T.J., Lührig, S., Korschneck, I. et al. Diagnostic performance of the noninvasive prenatal FetoGnost RhD assay for the prediction of the fetal RhD blood group status. Arch Gynecol Obstet (2021)

## Why choose Eluthia?

Eluthia is an independent laboratory based in Giessen. We specialise in non-invasive prenatal testing (NIPT) and offer customised testing options for you and your baby.

As we do not belong to any laboratory chain and are not contractually bound, we can offer you globally unique NIPT solutions. Our well-connected team of experts (biologists, human geneticists, gynaecologists and prenatal physicians) is in contact with numerous laboratories at home and abroad in order to always be able to offer you the most advanced and safest tests.

Our aim is to be able to offer every pregnant woman the test that is most suitable for her.

We strive to offer you the best service at all times. If you have any questions or suggestions, or if you are not satisfied with one of our services, we would be pleased to receive your feedback.

# Contact us!

You can find more information online at:

[www.eluthia.com/rhesus](http://www.eluthia.com/rhesus)



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We are looking forward to your call!

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