Noninvasive prenatal testing for fetal RHD status
RhD Incompatibility and Immunity

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Mother produces antibodies, which attack the baby’s red blood cells.

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FETAL RHD TESTING

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WHY PRENATAL TESTING FOR RHESUS D IS IMPORTANT?

You may soon be asked to have a blood test to determine your blood type and Rhesus D (RhD) factor by your health care provider. This information will help your health care provider determine if there is an increased risk of RhD incompatibility of blood types between you and your baby and, if necessary, prevent and treat your baby for RhD disease.

This test can determine the RhD status of your baby and requires only a blood test from you.

WHAT IS RHESUS D?

People have one of four blood types: A, B, AB or O. Each of these are further classified according to the presence or absence of Rh factor proteins on the surface of your red blood cells, which carry the Rhesus antigens. One of the main antigens is D. If you have the protein, you are called RhD positive; if you don’t have the protein you are RhD negative. About 85% of Caucasians are RhD positive, while 92-98% of African American and Hispanic populations and 98-99% of Asian and Native American populations are RhD positive.
**WHAT IS RH D INCOMPATIBILITY?**

RhD incompatibility in pregnancy occurs when the mother is negative for the Rhesus D factor and the baby is positive. During pregnancy the baby’s blood cells may enter the mother’s bloodstream causing the mother to produce antibodies that destroy and eliminate the baby’s red blood cells. This immune response may lead to RhD disease.

Your health care provider may recommend the SensiGene RHD Genotyping test to determine whether your baby is Rhesus D positive or negative to aid in the proper care for you and your baby.

Normally this does not occur during a first pregnancy. However, during birth a mother and her baby’s cells can mix together and a mother may develop antibodies that could cause RhD disease in her future pregnancies. Invasive tests, such as an amniocentesis or a prior miscarriage may also cause this to occur.

**WHAT IS RH D DISEASE?**

RhD disease can result in jaundice, anemia, brain damage, heart failure or even fetal death. Without treatment, severe cases may result in stillborn deliveries.

Cutting edge technology delivers your baby’s genetic risks for RhD disease

Optimal pregnancy management using only a blood test
WHAT TREATMENT IS AVAILABLE?

If you are RhD negative and you are carrying a baby who is RhD positive, your health care provider may give you two Rh immune globulin (Rh Ig) injections—usually one at 28 weeks’ gestation and a second within 72 hours after birth, which will help to prevent you from developing the damaging RhD antibodies.

If your health care provider determines that you have already developed RhD antibodies and are at risk, he/she will closely monitor your baby’s health and may recommend further blood tests, amniocentesis, Doppler ultrasound or cordocentesis.

WHAT IS RH D GENOTYPING?

The SensiGene RHD Genotyping test is a noninvasive test that can determine the RhD status of your baby through a blood sample. Your health care provider can recommend this test to determine early in your pregnancy whether your baby is Rhesus D positive or negative and determine the proper care for you and your baby.

This test provides timely and accurate information about the RhD status of your baby. For more information, ask your health care provider about this test.
No test is perfect. While results of the SensiGene Fetal RHD Genotyping test are highly accurate, false positive and false negative results may occur in rare cases. A negative result does not ensure RhD compatibility. The results of this testing, including the benefits and limitations, should be discussed with your health care provider.

Sequenom Laboratories, a wholly-owned subsidiary of Sequenom, Inc., is a CAP-accredited and CLIA-certified molecular diagnostics laboratory dedicated to improving patient outcomes by offering revolutionary laboratory-developed tests for a variety of prenatal and eye conditions. Sequenom Laboratories pioneered NIPT for fetal aneuploidies with the launch of its MaterniT21™ PLUS test, and offers a full menu of prenatal tests.

The SensiGene® Fetal RHD Genotyping test is a laboratory-developed test that was developed, validated and is performed exclusively by Sequenom Laboratories.

REFERENCES


Sequenom Laboratories
3595 John Hopkins Court
San Diego, CA 92121

info@sequenom.com
sequenom.com/laboratories

Toll Free (within the US) at
877.821.7266

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