



NUH Women's Centre
Is My Answer

Diagnosing Chromosomal Abnormalities with QF-PCR

A member of the NUHS

Contact Us

Fetal Care Centre (FCC)
Kent Ridge Wing, Level 3

Fetal Care Centre Annex
Main Building, Level 1

Tel/Appointment : 6772 5180
 Fax : 6772 4547
 Email : FCC@nuhs.edu.sg
 Website : www.nuhgynae.com.sg

Opening Hours : 8.30 am - 6.00 pm (Mondays – Thursdays)
 8.30 am - 5.30 pm (Fridays)

Location



National University Hospital
 5 Lower Kent Ridge Road, Singapore 119074
 Tel: (65)6779 5555 Fax: (65)6779 5678
 Website : www.nuh.com.sg
 Co. Reg. No. 198500843R

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Your baby's **health**
is **important** to us too

The QF-PCR Test: Accurate and reliable results within 48 hours!

Stop the wait!

Due to intensive cell culture, results of conventional prenatal genetic tests can take up to 14 days. With QF-PCR, wait no more!

Results from QF-PCR will be available to you within 48 hours. You no longer need to wait for 7-14 days before knowing the health outcome/assessment of your baby. You can now find out if your baby has common chromosomal abnormalities within 48 hours of your amniocentesis, chorionic villus sampling or fetal blood sampling.

What is QF-PCR?

QF-PCR stands for Quantitative Fluorescence Polymerase Chain Reaction. It amplifies specific DNA sequences obtained from your baby for rapid automated analysis.

How does this work?

Every normal human cell contains 23 pairs of chromosomes. In each pair of chromosomes, one comes from the father while the other from the mother.

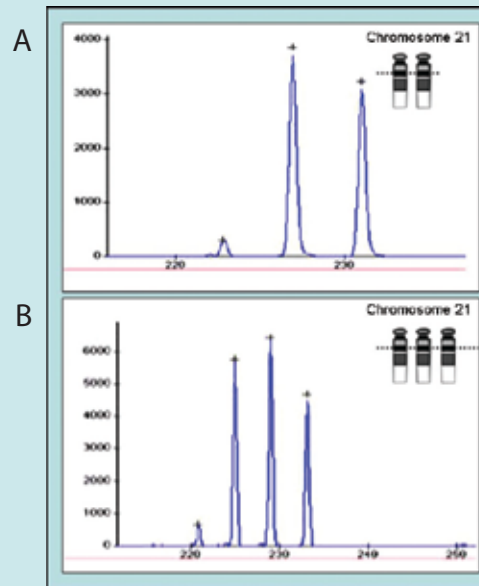
Chromosome abnormality is a result of a change in the number or structure of chromosomes. This will usually affect the instructions carried by the genes contained in the chromosomes, resulting in abnormalities in development.



Diagnosing Chromosomal Abnormalities with QF-PCR

The QF-PCR test can detect the major chromosome abnormalities involving 13, 18, 21.

The figure below shows QF-PCR results from two babies where (A) shows 2 copies of chromosome 21 with 2 peaks, indicating a normal fetus; (B) shows 3 copies of chromosomes 21 with 3 peaks, indicative of Trisomy 21 or more commonly known as Down Syndrome.



What can QF-PCR tests for?

QF-PCR can examine chromosomes that account for 95% of all associated abnormalities seen, with Down Syndrome being the most frequent. Other common genetic anomalies include:

- Edward's syndrome
- Patau's syndrome

Who is suitable for QF-PCR?

QF-PCR is recommended for expectant mothers who are undergoing invasive testing such as amniocentesis, chorionic villus sampling and fetal blood sampling.

