

Cytogenetics

Cytogenetics analyses

Chromosome analysis / Karyotype

Sample / amount	Shipping container	Procedure
Blood (12 mL)	1 × Li-Heparin tube, green without gel (5G)	Send in immediately! Otherwise: +4°C
Chorionic villi (at least 10 mg)	Chorionic villi tube with transport medium (60) or sterile tube, red (29) with 0.9% NaCl	Send in immediately! Otherwise: +4°C
Umbilical cord blood (2 – 10 mL)	1 × Li-Heparin tube, green without gel (5G) or sterile tube, red (29) with 2 – 3 drops of Liquemin	Send in immediately! Otherwise: +4°C
Amniotic fluid (10 – 20 mL)	2 × sterile tubes, red (29) (also for analysis of acetyl choline esterase or alpha-fetoprotein)	Send in immediately! Otherwise at room temperature
Interphase FISH: prenatal rapid test (20 mL)	3 × sterile tube, red (29)	Send in immediately and only in conjunction with amniocentesis! Otherwise at room temperature

Interphase FISH is to be considered an experimental analysis. Its findings must be confirmed by conventional chromosome analysis. Chromosomes that are analyzed: X, Y, 13, 18, and 21. Results are currently available 2 to 3 working days after sample entry.

Further pre- and postnatal human genetic analyses upon request.

Abortion

What sample for what indication?

We recommend to send in at least two of the samples as stated below. A combination of chorionic villi and umbilical cord blood has proven useful. Both can be used for FISH in most cases, even if cells can no longer be stimulated to proliferate.

Attention: sample contamination! Regressively altered or bacterially contaminated abortion sample may proliferate slowly in vitro or not at all.

Sample / amount	Shipping container	Procedure	When
Chorionic villi (at least 10 mg)	Chorionic villi tube with transport medium (60) or sterile tube, red (29) with 0.9% NaCl	Send in immediately! Otherwise: +4°C	Always (1 st priority)
Umbilical cord blood (2 – 10 mL)	Li-Heparin tube, green (5) or sterile tube, red (29) with 2 – 3 drops of Liquemin	Send in immediately! Otherwise: +4°C	Always (2 nd priority)
Heart blood (10 mL)	Li-Heparin tube, green (5) or sterile tube, red (29) with 2 – 3 drops of Liquemin	Send in immediately!	As an alternative to umbilical cord blood
Amniotic fluid (10 – 20 mL)	2 × sterile tube, red (29)	Send in immediately! Otherwise at room temperature	With induced abortion
Achilles' tendon or piece of dorsal skin	Sterile tube, red (29) with 0.9% NaCl	Send in immediately! Otherwise +4°C	If other samples are not possible or contaminated