

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 |