

# Karyotyping

The following tests are available:

- **Chromosome analysis in peripheral lymphocytes**

Indication: Infertility, offspring with known chromosomal defects, recurrent abortions, prenatal testing, primary dysmorphia syndrome, primary gonosomal chromosome mutations.

Material: 2 tubes of heparin blood without 'heparin coated pearls', you can use gel tubes or liquid heparin.

Preanalytics: sterile heparin blood (without centrifugation additives such as gel or plastic pearls). Do not freeze!

TAT: 2-3 weeks\*

Method: Cell culture of peripheral T-cells, chromosome analysis (Trypsin-Giemsa staining).

- **Chromosome analysis in chorionic villae sampling (CVS)**

Material: Chorion tissue, make sure that there is no contamination with maternal tissue. However a maternal control to exclude contamination is necessary. Please also send 1 tube of EDTA blood from the mother.

Preanalytics: Chorion tissue samplings (CVS), store or dispatch cool, do not freeze, no alcoholic or preserving additives, only physiological NaCl or special culture medium for cell cultures (please indicate, if it is used)

TAT: 4 weeks\*

Method: Direct preparation, long-term cultivation, chromosome analysis. Contamination control.

- **Chromosome analysis from skin biopsy (fibroblast culture)**

Material: skin tissue

Preanalytics: send sterile skin preparation, approx. 1 cm<sup>2</sup> in a sterile container, store or dispatch cool, do not freeze, no alcoholic or preserving additives, only physiological NaCl or special culture medium for cell cultures (please specify if it is used)

TAT: 4 weeks\*

Method: cultivation, long-term cultivation of fibroblasts, chromosome analysis.

- **Chromosome analysis in amniotic fluid, amniocentesis**

Material: 10-15 ml amniotic fluid

Preanalytics: send e.g. in sealed syringe, store or dispatch at ambient temperature, do not refrigerate or freeze, no liquid or preserving additives.

TAT: 2-3 weeks\*, (FISH test, up 7 days)

Method: cultivation, long-term cultivation of fibroblasts, chromosome analysis

Note: Fast FISH analysis for common trisomies (13, 18, 21) recommended

- **Chromosome analysis in aborted fetal material**

Indication: Recurrent abortions/miscarriages

Material: fetal tissue and parental blood (3-5 ml EDTA blood and 3 ml Heparin blood)

Preanalytics: Do not freeze!

TAT: 6-8 weeks\* ,(including FISH-validation)

Method: isolation of DNA, hybridization to standard array

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>