

SAMPLE SUBMISSION GUIDE

Fragment Length Analysis Services

General Instructions

Sample Data and Formats

- Please use our [ecommerce webshop](#) for fragment length analysis service (alternatively please request our offline order form from support-eu@genomics.eurofinseu.com or download it from our [webpage](#)).
- Our ecommerce webshop will guide you through the order step by step (alternatively please send the completed order form together with the Excel list (tabs 2 & 3 of the order form) containing the sample names electronically to support-eu@genomics.eurofinseu.com and as a hard copy together with the samples).
- You can send your samples in following formats:
 - 0.2 ml tubes (up to 8 samples per batch)
 - 8-well strips (up to 32 samples per batch)
 - **Non-flexible** 96-well PCR plates, preferably semi-skirted with V-well bottoms

Please use 96-well plates **whenever possible** but especially for sample numbers of at least 33 samples per batch.

Please use the following 96-well plate type especially for Ready-to-Load samples:

e.g. MicroAmp[®] Optical 96-Well Reaction Plate (Thermo Fisher Scientific Inc., cat. no. 4316813)

Sample preparation and concentration

- Label your samples according to the sample names indicated in your sample list:
 - Single tubes on the lid
 - 8-strips on the side
 - 96-well plates on the plate frame
- Concentration across all samples **must be normalised**
- For multiplex analysis, the concentrations of the PCR products in a sample **must be normalised**, in order to get a balanced profile (variations of max. 50% are recommended)
- The concentration of each PCR product resp. marker should be **50 – 100 ng/μL**
- Use 8-cap strips for sealing 8-well strips and 96-well plates (recommended)
- Alternatively, adhesive PCR foil (e.g. from 4titude[®], code: 4ti-0500) can be used
 - Make sure the plate has reached room temperature and the plate surface is absolutely dry before you stick the foil on the plate
 - Seal the plate tightly and avoid folding; don't freeze and thaw the plate after sealing

Shipping address

- Ship the samples liquid at ambient temperature to:
Eurofins Genomics Applied Genomics
Christian Dorn, Building 5
Anzinger Str. 7a
D-85560 Ebersberg

Matrix, Filter Sets and Dye Combinations

Following filter sets and dye combinations are used as matrix and for labelling the PCR products:

FAM, NED, HEX and ROX*	(ABI Standard Dye Set DS-30)
FAM, JOE or HEX, TAMRA and ILS600	(Promega ILS600)
FAM, VIC, NED and ROX*	(ABI Standard Dye Set DS-31)
FAM, JOE, NED and ROX*	(ABI Standard Dye Set DS-32)
FAM, VIC, NED, PET and LIZ*	(ABI Standard Dye Set DS-33)
FAM, Yakima Yellow, ATTO 550, ATTO 565 and ATTO 663*	(Eurofins alternative dye set EF-01)

*the dyes ROX, LIZ are reserved for the size standard and **should not be used** for PCR product labelling. Additionally, also dye ATTO 663 **should not be used** as it is detected in the same channel like LIZ size standards.

*possible size standards that can be added from our side are: ROX-500, LIZ-500, ILS600 as well as LIZ-1200. The Eurofins alternative dye set EF-01 can only be combined with LIZ size standards.

FLA Ready-to-Load Service

- Perform your PCR with the respective dye labelled primers which can be analysed with one of the above described filter sets
- The concentration of the PCR products should be 50 – 100 ng/μL
- Mix the Ready to Load samples as follow:
 - 10 μL Hi-Di Formamide loading buffer (Applied Biosystems)
 - 0.5 μL internal size standard (e.g. ROX-500 or LIZ-500).
 - 2 μL per PCR product
- The total sample volume should be 10 – 15 μL.
- Delivery Time: usually, 5 days.

Fragment Length Analysis Service

- Perform your PCR with the respective dye labelled primers which can be analysed with one of the above described filter sets
- Send us the PCR products in a concentration of 50 – 100 ng/μL
- The total sample volume should be 10 – 20 μL.
- Delivery Time: usually, 10 days.

Contact

Please do not hesitate to contact us in case of any questions.

Email: support-eu@genomics.eurofinseu.com

Phone: +49 7531 81 60 68

Registered trademarks are listed at eurofinsgenomics.com