

SAMPLE SUBMISSION GUIDE

Fragment Length Analysis Services

General Instructions

Sample Data and Formats

- Please use our [order form](#) for fragment length analysis service
- Send the filled order form together with a separate Excel list containing the sample names electronically to appliedgenetics-eu@eurofins.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:

MicroAmp[®] Optical 96-Well Reaction Plate (ThermoFischer, catalogue no. 4316813) or similar

- 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

- 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

Shipping

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

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 would be 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.

Fragment Length Analysis – 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, 10 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!

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