MRC Holland Support

What electrophoresis devices can I use for MLPA fragment analysis?

The MLPA procedure includes the separation of MLPA fragments on a capillary electrophoresis device. The table below lists some of the more common capillary electrophoresis devices supported by Coffalyser.Net.

Supplier	Device(s)	
Applied Biosystems	SeqStudio Genetic Analyzer	
	SeqStudio Flex Series Genetic Analyzer	
	3500 Series Genetic Analyzer	
	3730 Series Genetic Analyzer	
	3130 Series Genetic Analyzer	
	Hitachi	Compact CE Sequencer DS3000
Promega	Spectrum Compact CE System	
SCIEX/Beckman Coulter	GenomeLab GeXP	
	CEQ 8800 Genetic Analysis System	
	CEQ 8000 Genetic Analysis System	

A capillary electrophoresis device suitable for MLPA must:

- Be supported by Coffalyser.Net; see the Reference Manual for a full list of supported devices.
- Use denaturing conditions.
- Be compatible with 6-FAM or Cy5.0 labels used for our primers, and have a second channel suitable for a size marker.
- Be capable of separating fragments in the 50–500 nt range with sufficiently high resolution to separate MLPA fragments.
- Have a linear relationship between peak height and fragment concentration (within a certain signal range).
- Provide clean and reproducible peak patterns (e.g. no excess noise, extra peaks or

inconsistent signal heights).

Unsuitable capillary electrophoresis devices

Capillary electrophoresis devices that use non-denaturing conditions are not suitable. Secondary structures will alter the relative mobility of MLPA reaction products, which can lead to different apparent sizes or even to position swaps of fragments in the electropherogram. Devices that this applies to, which are *not* suitable for MLPA, include the Agilent (formerly Advanced Analytical/AATI) Fragment Analyzer, the Agilent 2100 Bioanalyzer, the Agilent TapeStation systems, the Caliper LabChip GX/GXII and the QIAGEN QIAxcel.

Note

This article is about conventional MLPA. For information about digitalMLPA, see this article.

Tags

MLPA

Related Content

- What is the optimal signal range for capillary electrophoresis of MLPA fragments?