MRC Holland Support

What is the "max probe length deviation" warning, and what are purple bins in Coffalyser.Net?

The max probe length deviation warning and purple bin colors in Coffalyser.Net are designed to provide a warning when a probe signal is too far away from the centre of a bin. Signals that are not in the centre of the bin could indicate the use of an incorrect bin set, but may also be a sign of other experimental issues.

Note
The max probe length deviation quality score and the purple bin colors were added in Coffalyser v.210226.1433.

Background

It is essential that the correct peaks are assigned to the correct probes during analysis. Coffalyser.Net uses bins which indicate the fragment size boundaries within which a probe peak is expected. Read more about bins or about how to adjust them.

When signals are too far from the centre of a bin, the data should be inspected to make sure that there are no issues. This is why Coffalyser.Net provides warnings. Reasons for signals to be far from the centre of a bin include:

- An incorrect bin set, which may affect all samples in an experiment. Create a manual bin set to resolve the issue.
- Changes to electrophoresis conditions that result in different run lengths, either for the entire experiment or for some reactions/capillaries. If this is caused by changes to run settings, the manual bin set may need to be adjusted. If not, the electrophoresis device may require maintenance.
- Detection of a nonspecific peak or electrophoresis noise signal at a different length than the real probe fragment.

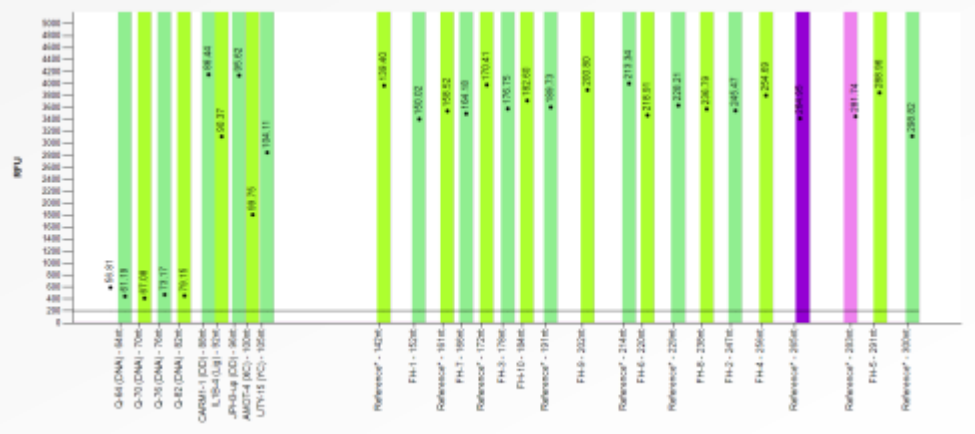
Warnings provided by Coffalyser.Net

Coffalyser.Net provides several warnings and visual indicators for probe peaks that deviate more than 0.7 nt from the centre of a bin.

- The max probe length deviation quality check provides a warning and FMRS score penalty.

Max probe length deviation	1.442

- Bins of deviating probes are colored purple in the binning profile tab in the fragment analysis and in the manual bin set editor.



- The Sample report tab of the comparative analysis shows an orange or red color for deviating values.

d(nt)
0.02
-1.44
0.9

- The value in the d[nt] column in the sample PDF report is bold for deviating values.

Tags

Coffalyser.Net

Related Pages

- What is a bin set?
- How do I adjust a bin set (create a manual bin set) in Coffalyser.Net?

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