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This article was retrieved from MRC Holland Support (support.mrcholland.com) on Tuesday, 15th July 2025.

Q- and D-fragments are present in SALSA® MLPA® probemixes for quality evaluation of an MLPA experiment.

Background

Four quantity fragments (Q-fragments) are present in each MLPA probemix at 64, 70, 76, and 82 nt. These Q-fragments are amplified independently of ligation. If sufficient sample DNA was used, and if the ligation step was successful, Q-fragments are quickly outcompeted by the exponentially amplified probes. Therefore, the Q-fragments are only visible in the presence of less than 100 ng of sample DNA or if the ligation step failed.

Two denaturation fragments (D-fragments) are present in almost all MLPA probemixes at 88 and 96 nt. D-fragments target extremely GC-rich sequences that are hard to denature, and thus give an indication if denaturation of your DNA sample was complete during the initial 5 minute 98°C DNA denaturation step. If a low signal for the 88 and 96 nt fragments is obtained in comparison to the 92 nt benchmark fragment, this indicates denaturation of your sample DNA was incomplete. A lower signal for only one of the two D-fragments may indicate another issue; [contact us](#) for assistance if required.

Almost all SALSA MLPA probemixes contain the aforementioned internal quality control fragments. Exceptions are noted in the product descriptions.

Click the image below to open our e-learning module about the quality control fragments for more detailed information. Detailed information can also be found in the [\(MS-\)MLPA General Protocol](#).



Tags

MLPA

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