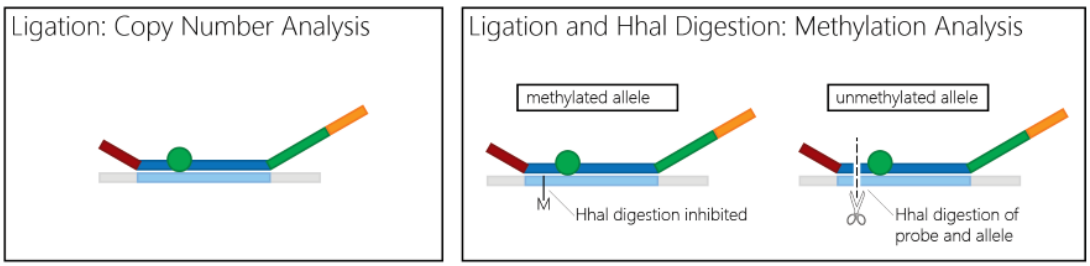
MRC Holland Support

How does methylation-specific MLPA (MS-MLPA) work?

Methylation-specific MLPA (MS-MLPA) works by using probes that bind to regions with a known restriction site for the methylation sensitive HhaI endonuclease. By using the HhaI enzyme on hybridised probe-DNA products you can determine the relative methylation of the target sequences. MLPA probes for methylation quantification are otherwise similar to conventional MLPA probes.



The complex that is formed after hybridisation of the probes to the sample DNA is digested by the HhaI restriction endonuclease. HhaI will only digest a recognition site if the sequence is unmethylated. Thus, probes that are hybridised to an unmethylated site are digested and will not produce a signal. In contrast, if the DNA target sequence detected by the probe is methylated, the sequence is resistant to digestion and the probe will generate a signal.

More information about the MS-MLPA technology can be found here. Available methylation-specific MLPA probemixes can be found by visiting our assay finder; probemixes with a product name beginning with ME are methylation-specific probemixes.

Note

Please note that the SALSA® HhaI enzyme, which is required for MS-MLPA reactions, is not included with MS-MLPA probemixes, and needs to be ordered separately (product code: SMR50).

Tags

MS-MLPA

Related Pages

- What is MLPA, and how does it work?

Disclaimer

The information provided in this material is correct for the majority of our products. However, for certain applications, the instructions for use may differ. In the event of conflicting information, the relevant instructions for use take precedence.