Certificate of Analysis
SALSA® MS-MLPA® Probemix ME042 CIMP

Catalogue #	**ME042-025R, ME042-050R, ME042-100R**
Product name	**Probemix ME042 CIMP**
LOT	**C2-1121**

Σ	25, 50, or 100 reactions.	
Shipping conditions	Dry ice or cooling elements.	
	Store upon arrival between -25°C and -15°C.	
	Expiration date: November 2026, when stored at recommended conditions. This product should not be frozen/thawed more than 25 times.	
Purpose	The SALSA MS-MLPA Probemix ME042 CIMP is developed for the detection of aberrant methylation and/or of deletions/duplications of one or more sequences in the promoter regions of the *CACNA1G*, *CDKN2A*, *CRABP1*, *IGF2*, *MLH1*, *NEUROG1*, *RUNX3* and *SOCS1* genes, as well as the presence of the *BRAF* p.V600E (c.1799T>A) point mutation. This probemix is designed for use only in combination with SALSA MLPA reagent kits, SALSA HhaI, SD029 and Coffalyser.Net analysis software as described in the MS-MLPA General Protocol.	
Quality control specifications	- Sufficient distance between peaks, absence of extra or shoulder peaks, and completeness of hybridisation and HhaI digestion of each individual probe, as tested on Applied Biosystems and Beckman/SCIEX GeXP sequencers. - Standard deviation of each individual probe ≤0.10, when tested on 23 different DNA samples of healthy individuals, extracted by various methods. - No-DNA controls result in only five major peaks shorter than 121 nucleotides (nt): four Q-fragments at 64, 70, 76 and 82 nt, and one peak in the range of 0-40 nt corresponding to the unused portion of the fluorescent PCR primer. Non-specific peaks longer than 121 nt AND with a height <25% of the median of the four Q-fragments are not expected to affect MLPA reactions when sufficient (50-250 ng) sample DNA is used. Note: We observed one prominent peak above the 25% threshold with a length of approximately 204 nt in a No-DNA control.	Test result PASS

None of the ingredients are derived from humans, animals, or pathogenic bacteria. Based on the concentrations present, none of the ingredients are hazardous as defined by the Hazard Communication Standard. **A Safety Data Sheet (SDS) is not required for these products**: none of the preparations contain dangerous substances (as per Regulation (EC) No 1272/2008 [EU-GHS/CLP] and amendments) at concentrations requiring distribution of an SDS (as per Regulation (EC) No 1272/2008 [EU-GHS/CLP] and 1907/2006 [REACH] and amendments). If spills occur, clean with water and follow appropriate site procedures.

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SALSA MS-MLPA Probemix ME042-C2 CIMP sample picture

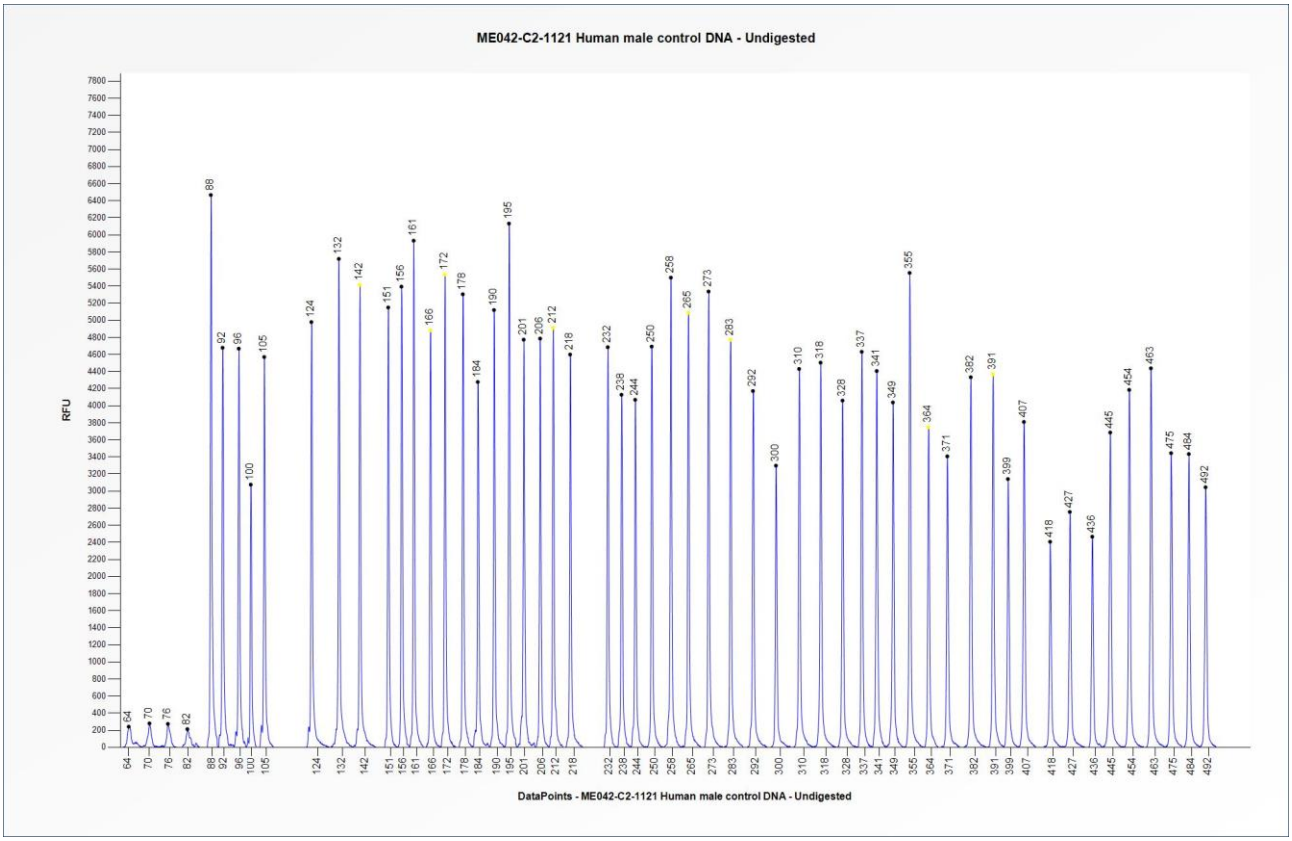

Figure 1. Capillary electrophoresis pattern from a sample of approximately 50 ng undigested human male control DNA analysed with SALSA MS-MLPA Probemix ME042 CIMP (C2-1121) for the quantification of copy numbers.

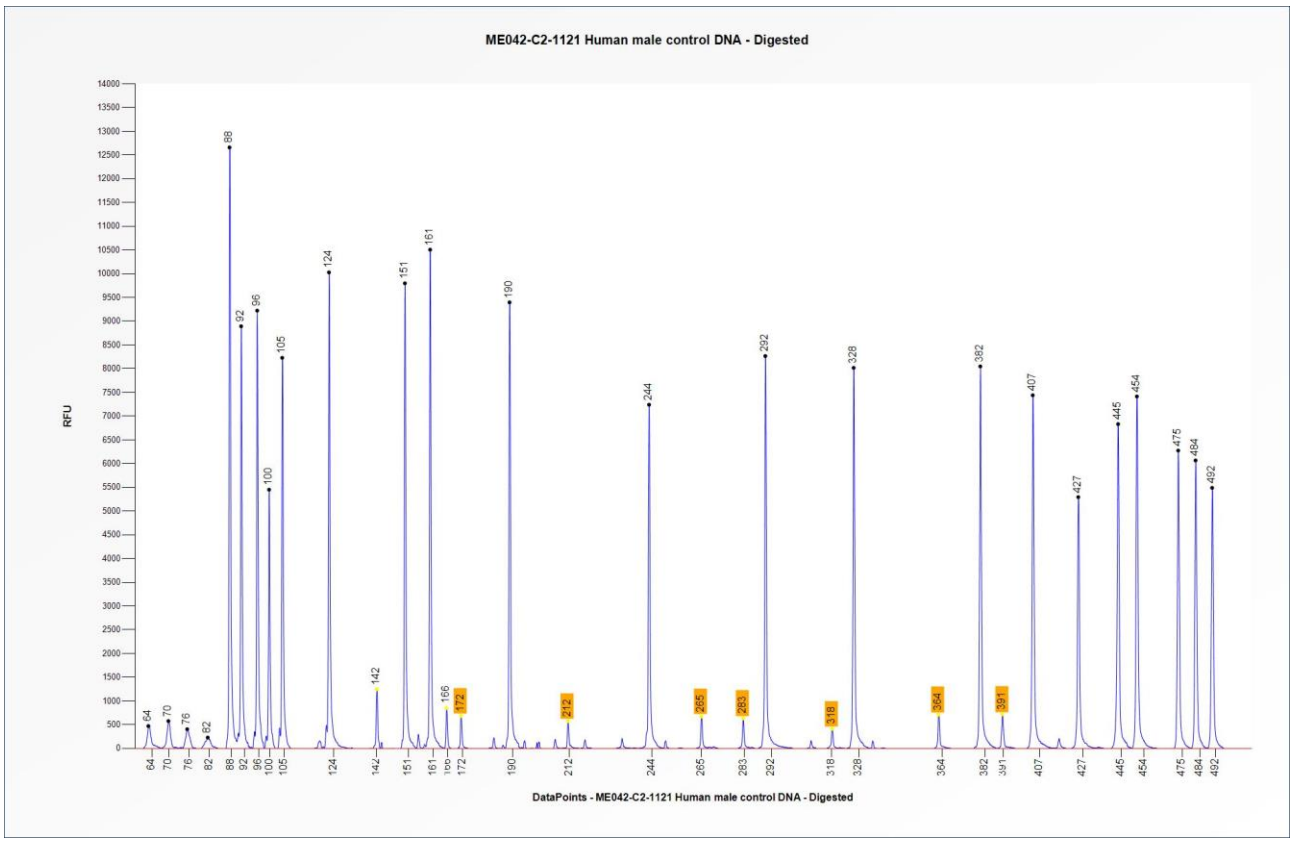

Figure 2. Capillary electrophoresis pattern from a sample of approximately 50 ng digested human male control DNA analysed with SALSA MS-MLPA Probemix ME042 CIMP (C2-1121) to determine the methylation status.

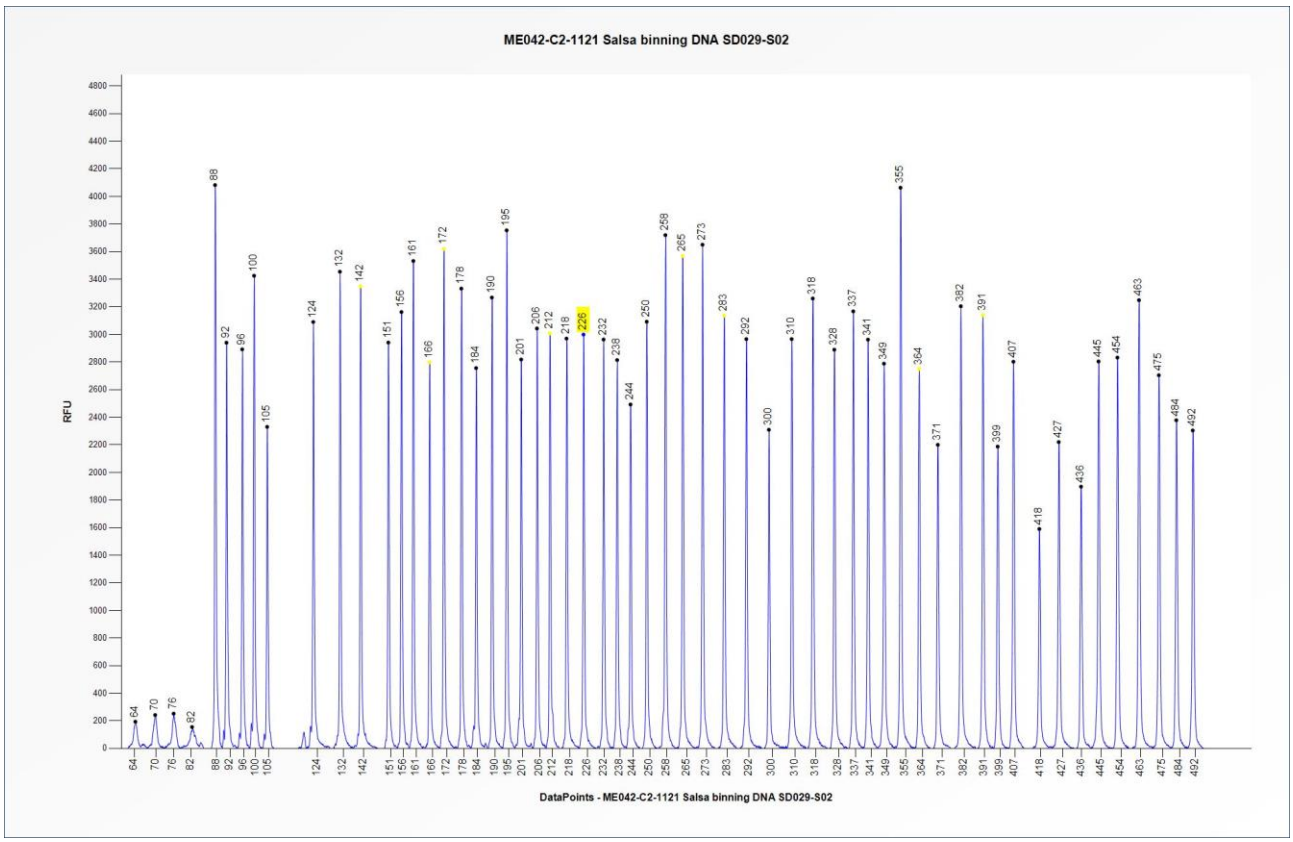

Figure 3. Capillary electrophoresis pattern from SALSA Binning DNA SD029-S01 (approximately 50 ng) analysed with SALSA MS-MLPA Probemix ME042 CIMP (C2-1121). The location of the *BRAF* p.V600E (c.1799T>A) mutation-specific probe at 226 nt is indicated.

This lot was certified by MRC Holland on 28 January 2022.

This certificate is a declaration of analysis at the time of the manufacturing process. All assays were run in compliance with manufacturer's instructions for use.

Implemented changes in the COA
Version 01 – 28 January 2022 (4) - Not applicable, new document.