





## Certificate of Analysis

### SALSA® MLPA® Probemix P319 Thyroid

<b>Catalogue #</b>	<b>P319-25R, P319-50R, P319-100R</b>	
<b>Product name</b>	<b>Probemix P319 Thyroid</b>	
<b>LOT</b>	<b>B1-0718</b>	
	25, 50, or 100 reactions.	
Shipping conditions	Dry ice or cooling elements.	
	Store upon arrival between -25 °C and -15 °C.	
	Expiration date: July 2023, when stored at recommended conditions. This product should not be frozen/thawed more than 25 times.	
Use	Detection of deletions or duplications in the human <i>TPO</i> , <i>PAX8</i> , <i>FOXE1</i> , <i>NKX2-1</i> and <i>TSHR</i> genes, as described in Table 1 and 2 of the Product Description. This probemix is designed for use only in combination with SALSA MLPA reagent kits as described in the MLPA General Protocol.	
Quality Test 1	Sufficient distance between peaks, absence of extra or shoulder peaks, completeness of hybridisation of each individual probe, as tested on Applied Biosystems 3130 and Beckman GeXP sequencers.	PASS
Quality Test 2	Standard deviation of each individual probe is <0.10, when tested on 23 different DNA samples of healthy individuals, extracted by various methods.	PASS
Quality Test 3	Standard deviation of each individual probe, tested on a single DNA sample under various experimental conditions, meeting reaction-specific criteria. Conditions tested include: pipetting errors; evaporation; deviating thermocycler temperatures; presence of salts (affecting DNA sample denaturation) or presence of impurities in the DNA sample.	PASS
Quality Test 4	No DNA controls resulted in only five major peaks shorter than 121 nucleotides (nt): four Q fragments at 64, 70, 76 and 82 nt, and one 19 nt peak 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 were not observed. Note: peaks below this 25% threshold are not expected to affect MLPA reactions when sufficient (50-250 ng) sample DNA is used.	PASS

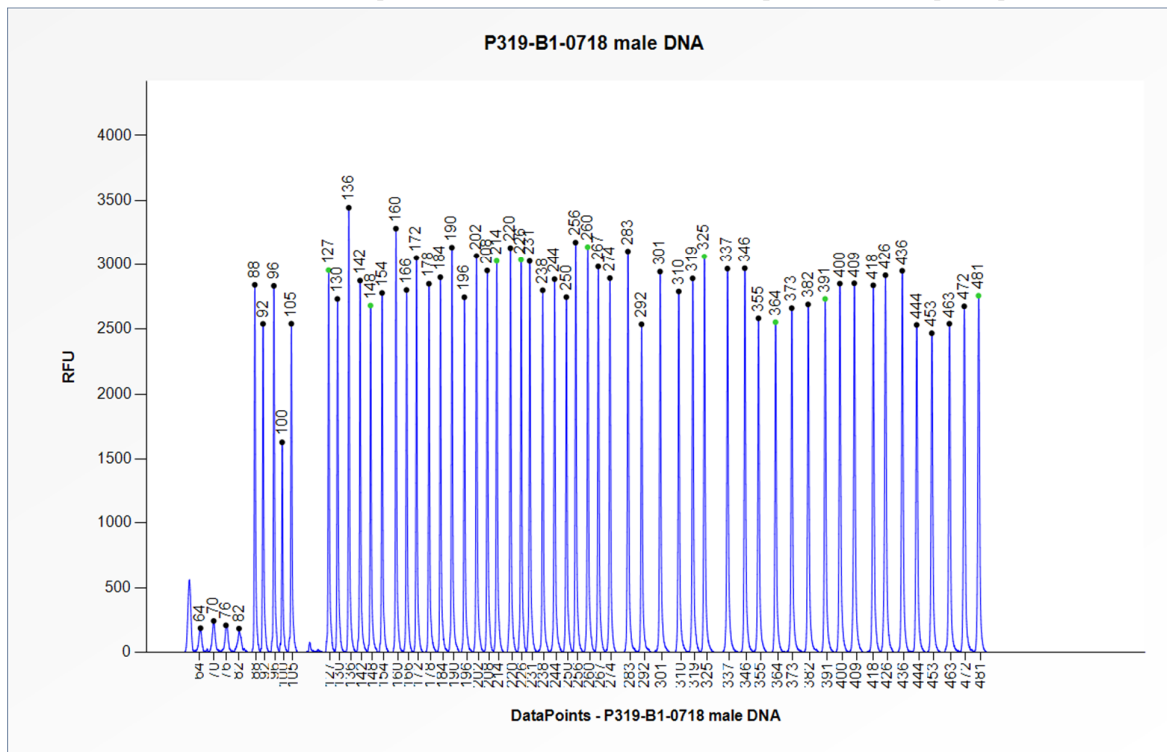
**FOR RESEARCH USE ONLY. FOR IN VITRO USE ONLY.**

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.

<b>More information: <a href="http://www.mlpa.com">www.mlpa.com</a>; <a href="http://www.mlpa.eu">www.mlpa.eu</a></b>	
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### SALSA® MLPA® probemix P319-B1 Thyroid sample picture



**Figure 1.** Capillary electrophoresis pattern from a sample of approximately 50 ng human male control DNA analysed with SALSA MLPA probemix P319 Thyroid (B1-0718).

**This lot was certified by MRC-Holland on 27 September 2018.**

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 – 27 September 2018 (03)  
- Not applicable, new document.