





## Certificate of Analysis

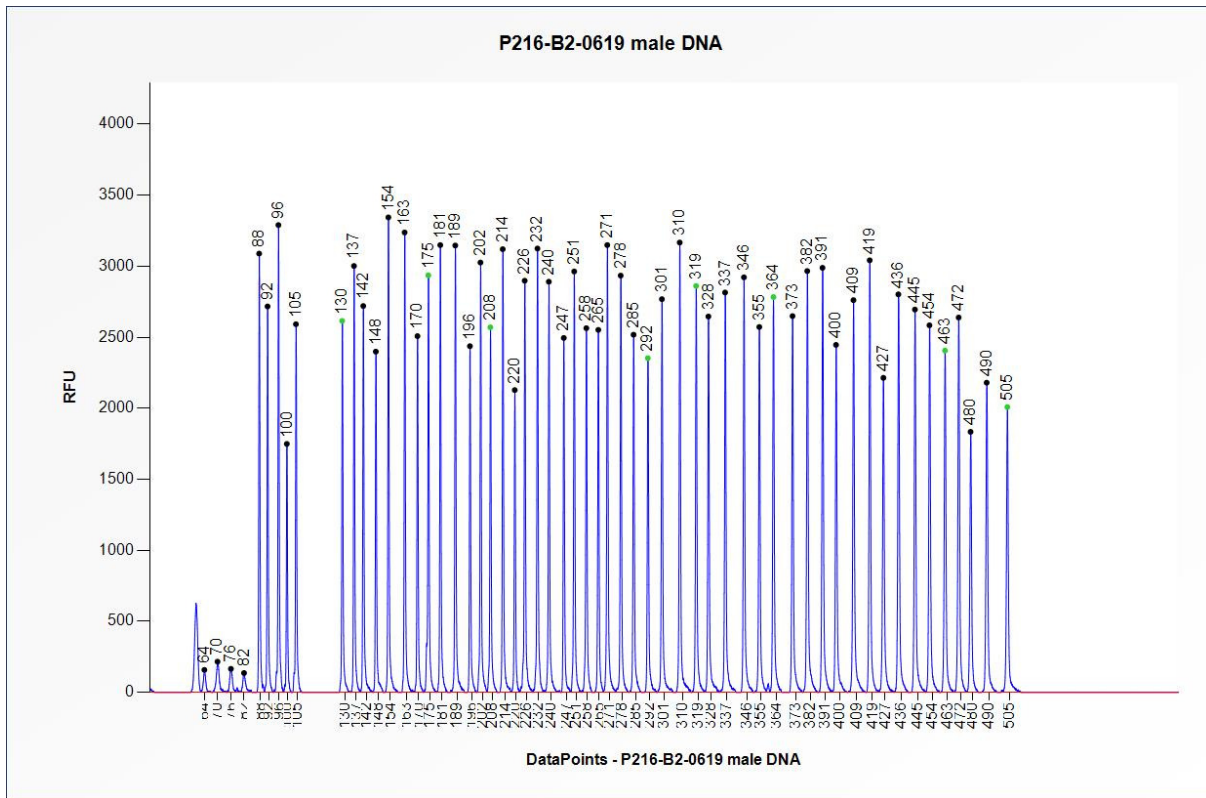
### SALSA® MLPA® Probemix P216 Growth Hormone Deficiency mix-1

<b>Catalogue #</b>	<b>P216-025R, P216-050R, P216-100R</b>	
<b>Product name</b>	<b>Probemix P216 Growth Hormone Deficiency mix-1</b>	
<b>LOT</b>	<b>B2-0619</b>	
	25, 50, or 100 reactions.	
Shipping conditions	Dry ice or cooling elements.	
	Store upon arrival between -25°C and -15°C.	
	Expiration date: June 2024, when stored at recommended conditions. This product should not be frozen/thawed more than 25 times.	
Use	This product has been developed to determine the DNA copy number of almost all exons of the human <i>GHI</i> , <i>POU1F1</i> , <i>PROPI</i> , <i>GHRHR</i> , <i>LHX3</i> , <i>LHX4</i> , and <i>HESX1</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 and Coffalyser.Net as described in the MLPA General Protocol.	
Quality control specifications	<ul style="list-style-type: none"> <li>- Sufficient distance between peaks, absence of extra or shoulder peaks, and completeness of hybridisation of each individual probe, as tested on Applied Biosystems 3130 and Beckman/SCIEX GeXP sequencers.</li> <li>- Standard deviation of each individual probe <math>\leq 0.10</math>, when tested on 23 different DNA samples of healthy individuals, extracted by various methods.</li> <li>- Each individual probe meets reaction-specific criteria when tested on a single DNA sample under various experimental conditions.</li> <li>- 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 19 nt peak corresponding to the unused portion of the fluorescent PCR primer. Non-specific peaks longer than 121 nt AND with a height &lt;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 360 nt in a No DNA control.</li> </ul>	<p>Test result</p> <p style="text-align: center; font-weight: bold;">PASS</p>

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:</b> <a href="http://www.mlpa.com">www.mlpa.com</a> ; <a href="http://www.mlpa.eu">www.mlpa.eu</a>	
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**SALSA MLPA Probemix P216-B2 Growth Hormone Deficiency mix-1**  
**sample picture**



**Figure 1.** Capillary electrophoresis pattern from a sample of approximately 50 ng human male control DNA analysed with SALSA MLPA Probemix P216 Growth Hormone Deficiency mix-1 (B2-0619). A small non-specific peak, with a height <5% of the median height of the reference probes, may appear in DNA samples at 360 nt. This peak is not expected to influence results.

**This lot was certified by MRC-Holland on 14 August 2019.**

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 – 14 August 2019 (04)*

- Not applicable, new document.