





**Certificate of Analysis**  
**SALSA® MLPA® Probemix P104 Menkes ATP7A**

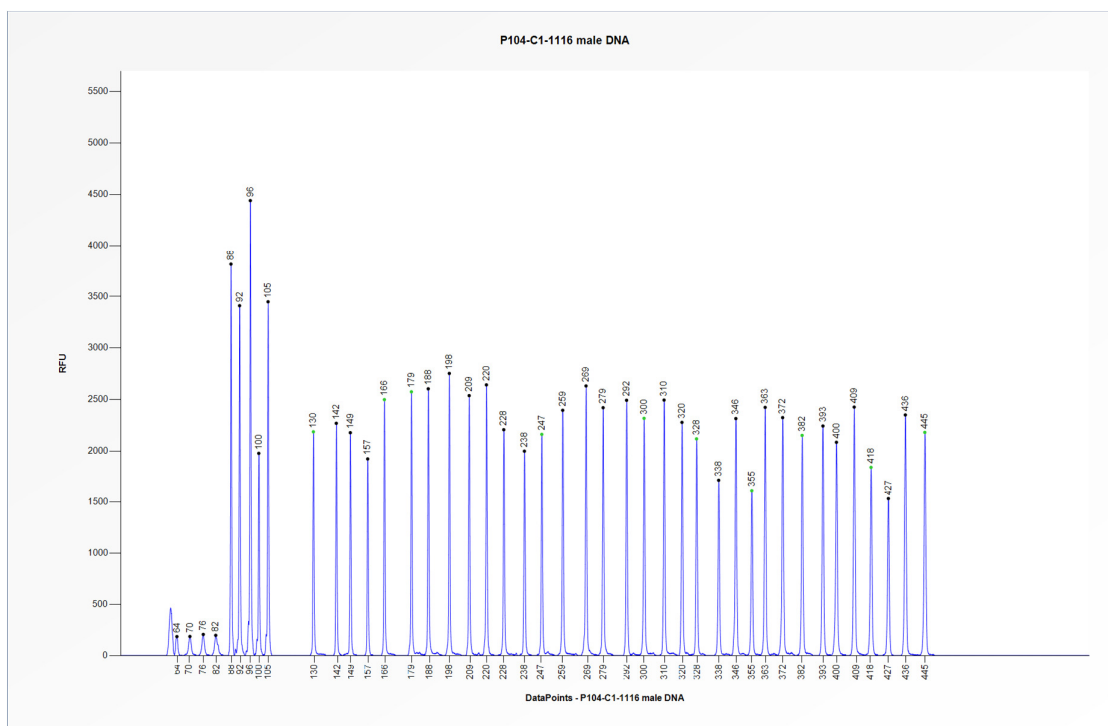
<b>Catalogue #</b>	<b>P104-025R, P104-050R, P104-100R</b>	
<b>Product name</b>	<b>Probemix P104 Menkes ATP7A</b>	
<b>LOT</b>	<b>C1-1116</b>	
	25, 50, or 100 reactions.	
Shipping conditions	Dry ice or cooling elements.	
	Store upon arrival between -25°C and -15°C.	
	Expiration date: November 2021, when 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 all exons of the human <i>ATP7A</i> gene, 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 ≤0.10, when tested on 23 different DNA samples of healthy individuals from the same sex, 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.</li> </ul>	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.

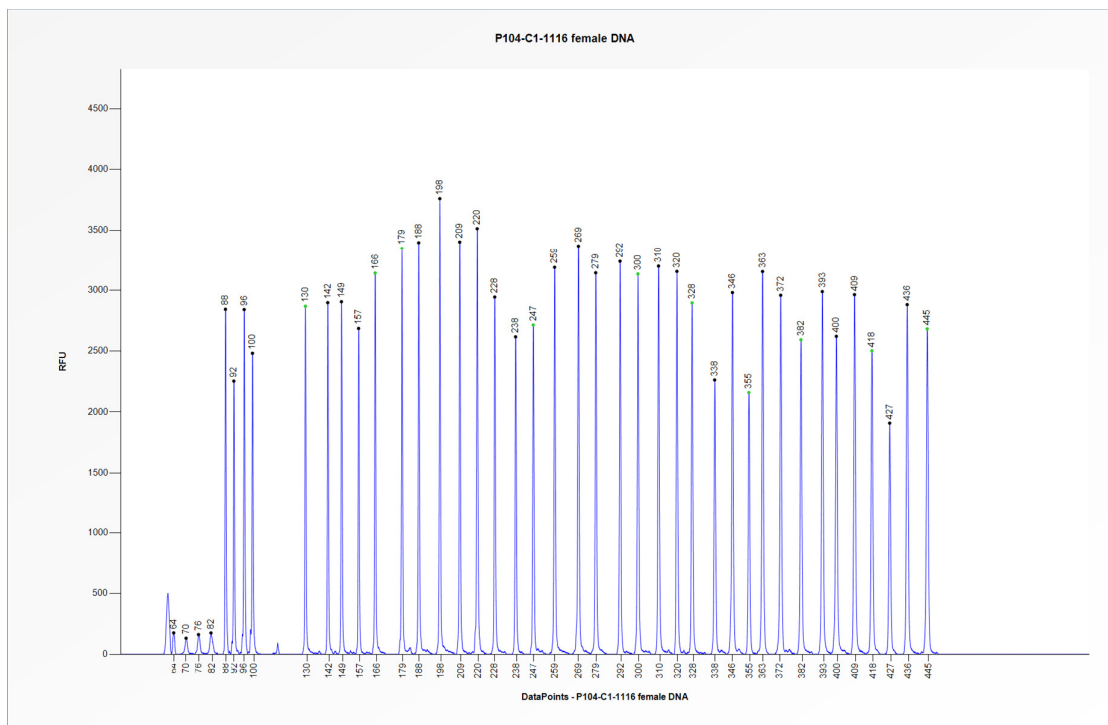
<b>More information:</b> <a href="http://www.mlpa.com">www.mlpa.com</a> ; <a href="http://www.mlpa.eu">www.mlpa.eu</a>	
	MRC-Holland bv; Willem Schoutenstraat 1 1057 DL, Amsterdam, The Netherlands
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### SALSA MLPA Probemix P104-C1 Menkes ATP7A sample picture



**Figure 1.** Capillary electrophoresis pattern from a sample of approximately 50 ng human male control DNA analysed with SALSA MLPA Probemix P104 Menkes ATP7A (C1-1116).



**Figure 2.** Capillary electrophoresis pattern from a sample of approximately 50 ng human female control DNA analysed with SALSA MLPA Probemix P104 Menkes ATP7A (C1-1116).

## Certificate of Analysis

**This lot was certified by MRC-Holland on 14 December 2016.**

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
<i>Version 01 – 28 November 2019 (04)</i> - Not applicable, new document.