




## Certificate of Analysis SALSA® Hhal

<b>Catalogue #</b>	<b>SMR50</b>	
<b>Product name</b>	<b>SALSA Hhal</b>	
<b>LOT</b>	<b>Lot 0125</b>	
	200 reactions	
Shipping conditions	Dry ice or cooling elements.	
	Store upon arrival between -25°C and -15°C.	
	Expiration date: January 2028, when stored at recommended conditions.	
Purpose	The Hhal enzyme is an essential component of the MS-MLPA procedure to detect changes in methylation and/or copy number of multiple sequences in a single reaction.	
Quality control specifications	<ul style="list-style-type: none"> <li>- Concentration tests using MS-MLPA reaction conditions.</li> <li>- Overdigestion tests with excess Hhal.</li> <li>- Exonuclease tests on synthetic oligos; fluorescently labelled at either the 3' or the 5' end, analysed by capillary electrophoresis.</li> </ul>	Test result
	Performance tested with MS-MLPA using: <ul style="list-style-type: none"> <li>- Low, normal and high concentration of Hhal.</li> <li>- Hhal that has been incubated at 30°C for one week.</li> <li>- Low, normal and high concentration of sample DNA.</li> <li>- Special reactions: including no DNA reactions, in vitro methylated DNA.</li> <li>- Each reaction result should conform to pre-determined specifications.</li> </ul>	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.

**This lot was certified by MRC Holland on 13 February 2025.**

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.

<b>More information:</b> <a href="http://www.mrcholland.com">www.mrcholland.com</a> ; <a href="http://www.mrcholland.eu">www.mrcholland.eu</a>	
	MRC Holland bv; Willem Schoutenstraat 1 1057 DL, Amsterdam, The Netherlands
E-mail	<a href="mailto:info@mrcholland.com">info@mrcholland.com</a> (information & technical questions) <a href="mailto:order@mrcholland.com">order@mrcholland.com</a> (orders)
Phone	+31 888 657 200

**Implemented changes in the COA**

Version 02 – 30 April 2026 (1)

- All references to digitalMLPA removed.

Version 01 – 13 February 2025 (1)

- Not applicable, new document.