# Product Description SALSA® Binning DNA SD085-S01

#### **Version S01**

#### Catalogue number

• SD085: SALSA Binning DNA, 6 reactions

### **Precautions and warnings**

For professional use only. Always consult the most recent product description AND the corresponding probemix product description AND the MLPA General Protocol before use: <a href="https://www.mrcholland.com">www.mrcholland.com</a>. Binning DNA is not known to contain any harmful agents.

#### Safety data sheet

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.

#### **General information**

The SALSA Binning DNA SD085 is a research use only (RUO) reagent to be used in combination with SALSA MLPA probemix P125-C1 Mitochondrial DNA, a SALSA MLPA Reagent Kit, and Coffalyser.Net<sup>™</sup> analysis software for the processes of linking all probe signals to their identity by use of the probe lengths. SD085 contains the targets of all probes included in the above-listed probemix, including the mutation-specific probe targets *ATP6* m.8993T>G, *ND1* m.3460G>A, *ND4* m.11778G>A, *ND6* m.14484T>C, *TK* m.8344A>G, *TL1* m.3243A>G.

Binning DNA should never be used as a reference sample in the MLPA data analysis. Neither should it be used in quantification of mutation signals.

#### Experimental set up

MLPA reactions for binning purposes should be performed with 5  $\mu$ l of Binning DNA. Inclusion of one reaction with SALSA Binning DNA SD085 in the initial MLPA experiment is essential as it can aid in data binning of the peak pattern when using Coffalyser.Net software. Furthermore, Binning DNA should be included in the experiment whenever changes have been applied to the set-up of the capillary electrophoresis device (e.g. when a different polymer type is used).

## **Data analysis**

Coffalyser.Net software should be used for analysis of MLPA experiments. When performing the fragment analysis step in Coffalyser.Net, select SD085 in the *bin smpl* –column. By selecting the SD085 sample as your binning sample, probes will be correctly identified in the peak pattern across all samples. Coffalyser.Net software is freely downloadable at <a href="https://www.mrcholland.com">www.mrcholland.com</a>.

#### **Binning DNA content**

MRC-Holland is unable to provide mutation positive human DNA samples. For only four of the six mutation specific probes present in the P125-C1 probemix, mutation positive cell lines are available (see P125-C1 product description). As an alternative, SD085 consists of a mixture of female genomic DNA from healthy individuals and a titrated amount of plasmid DNA that contains partial sequences of mitochondrial DNA. These partial sequences include six mutations that will be detected by the mutation-specific probes present in the above-listed probemix.

See Table 1 and the corresponding probemix product description for more details on mutation-specific probe targets present. The indicated mutation specific probes will generate a signal on SD085. Please note that, unlike true mutation positive samples, the signals of the probes specific for the wildtype alleles are not decreased when testing SD085.





# Table 1. Mutation specific probe targets in Binning DNA SD085-S01

Probemix	Gene	Probe length (nt)	Probe ID	Probemix version	Details
P125	TL1	281	21466-L29949	C1	m.3243A>G
	ND1	263	21443-L29946	C1	m.3460G>A
	TK	242	21440-L30473	C1	m.8344A>G
	ATP6	197	21433-L30223	C1	m.8993T>G
	ND4	216	21436-L29939	C1	m.11778G>A
	ND6	326	21452-L30472	C1	m.14484T>C

Note: Please consult the corresponding probemix product description for more information about mutation nomenclature.

More in	More information: www.mrcholland.com; www.mrcholland.eu		
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## Implemented changes in the product description

Version S01-02 - 11 August 2023 (03)

- Product description rewritten and adapted to a new template.

Version S01-01 - 01 October 2019 (15)

- Not applicable, new document.

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